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Helena Miguel Fernandes Nogueira Moreira
Medical liability and General Surgery – current status in Portugal

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Mestrado Integrado em Medicina

Área: Medicina Legal

**Trabalho efetuado sob a Orientação de:
Professora Doutora Teresa Maria Salgado Magalhães**

**E sob a Coorientação de:
Professor Doutor António Taveira Gomes**

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Faculdade de Medicina da Universidade do Porto, 19 / 03 / 2012

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Faculdade de Medicina da Universidade do Porto, 19/03/2012

Assinatura: Helena Miguel Fernandes Nogueira Moreira

Dedicatória

Aos meus pais e avós pela coragem, força e valores transmitidos durante a minha vida, sem os quais não teria sido possível terminar este percurso.

Ao Afonso pela compreensão e, sobretudo, pela ajuda inestimável nos momentos mais difíceis.

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Área do Projeto: Medicina Legal

Título do Projeto: Medical liability and General Surgery – current status in Portugal

Resumo:

Background : Medical liability is an up and coming question, since the community mindset is changing. In Portugal, there are few studies about medical liability, namely in a forensic perspective. General surgery (GS) is the third most common medical area implied. Our aims were to evaluate the current situation on medical liability in GS, the reasons for claims, the medico-legal conclusion, and the association between them and the judicial outcome.

Methods : We analyzed reports from the Medico-Legal Council of the National Institute of Legal Medicine of Portugal (CML) related to GS, during 2001-2010. Judicial outcomes of each case were required from the Public Prosecutor Office (PPO) and court. Statistical analysis was performed using chi-square test and the significance level considered was less than 5%.

Results and Conclusions : Alleged cases of medical liability in GS represent 11.2% of the total of cases analyzed at the CML. We estimated that in Portugal 4:100,000 surgeries are subject to litigation. The majority of complaints were due to patient's death (75.4%). Surgeries were involved in 55.2% and the most involved was laparoscopic cholecystectomy. In 76.1% of the cases the CML considered that there was no violation of *leges artis*; in 55.2% did not admit causality nexus between the medical practice and the alleged harm. The PPO prosecuted 8 doctors in 3 cases (6.4%), being only 1 convicted. The CML reports are an important technical-scientific tool for judicial decision; its reports significantly influenced the prosecutor decision ($p < 0.05$).

Palavras-chave: “medical liability”; “claims”; “litigation” “general surgery”

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Título do Projeto: Medical liability and General Surgery – current status in Portugal

(Responsabilidade Médica em Cirurgia Geral – análise da situação em Portugal)

Resumo:

Introdução: A Responsabilidade Médica é uma questão emergente dado que a mentalidade da comunidade está a mudar. Em Portugal, há poucos estudos sobre a Responsabilidade Médica, especialmente na perspetiva forense. A Cirurgia Geral (CG) é a 3ª especialidade mais envolvida. Os nossos objetivos foram avaliar a atual situação da Responsabilidade Médica na CG, as razões que levam à apresentação de queixa, conhecer a decisão médico-legal e a sua associação com a decisão judicial.

Métodos: Foram analisados os relatórios do Conselho Médico-Legal do Instituto Nacional de Medicina Legal (CML) relacionados com a CG de 2001 a 2010. Obteve-se informação da decisão judicial através do Ministério Público ou Tribunal. A análise estatística foi realizada utilizando o teste qui-quadrado e o nível de significância considerado foi inferior a 5%.

Resultados e Conclusões: Os alegados casos de Responsabilidade Médica em CG representam 11.2% do total de casos analisados no CML. Nós estimamos que em Portugal 4:100,000 cirurgias são sujeitas a litígio. A maioria das queixas foi devida à morte do paciente (75.4%). Em 56% dos casos houve, pelo menos, uma intervenção cirúrgica e a cirurgia mais envolvida foi a Colecistectomia Laparoscópica. Em 76.1% dos casos o CML considerou que não houve violação da *leges artis*; em 55.2% não foi admitido o nexo de causalidade entre a prática médica e a alegada lesão. O Ministério Público acusou 8 médicos em 3 casos (6.4%), sendo apenas 1 condenado. Os relatórios do CML são uma importante ferramenta técnico-científica para a decisão judicial; os seus relatórios influenciam significativamente a decisão do Procurador ($p < 0.05$).

Palavras-chave: “responsabilidade médica”; “litígio”; “queixa”; “cirurgia geral”

Palavras-chave: (em português ou inglês de acordo o título do trabalho)

Title Page

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Conflict of Interest

The author declares that there is no conflict of interest.

Abstract

Background

Medical liability is an up and coming question, since the community mindset is changing. In Portugal, there are few studies about medical liability, namely in a forensic perspective. General surgery (GS) is the third most common medical area implied. Our aims were to evaluate the current situation on medical liability in GS, the reasons for claims, the medico-legal conclusion, and the association between them and the judicial outcome.

Methods

We analyzed reports from the Medico-Legal Council of the National Institute of Legal Medicine of Portugal (CML) related to GS, during 2001-2010. Judicial outcomes of each case were required from the Public Prosecutor Office (PPO) and court. Statistical analysis was performed using chi-square test and the significance level considered was less than 5%.

Results and Conclusions

Alleged cases of medical liability in GS represent 11.2% of the total of cases analyzed at the CML. We estimated that in Portugal 4:100,000 surgeries are subject to litigation. The majority of complaints were due to patient's death (75.4%). Surgeries were involved in 55.2% and the most involved was laparoscopic cholecystectomy. In 76.1% of the cases the CML considered that there was no violation of *leges artis*; in 55.2% did not admit causality nexus between the medical practice and the alleged harm. The PPO prosecuted 8 doctors in 3 cases (6.4%), being only 1 convicted. The CML reports are an

important technical-scientific tool for judicial decision; its reports significantly influenced the prosecutor decision ($p < 0.05$).

Text

Introduction

Medical liability

Medical liability is the ability to assign responsibility to a doctor in a case of alleged harm to a patient, due to failure to provide a service that was required by the patient or his/her representative. “Medical malpractice is defined as any act or omission, by a doctor, during patient treatment that deviates from accepted norms of practice in the medical community and causes injury to the patient” [1]. In the past, little or nothing was discussed about this subject; doctor was thought to be a “God on Earth”, gifted of all the skills and would always act in the patient’s best interest. The relationship was linear and stable: the patient was delivered to the doctor and he/she would paternally assume care of the person in need[2]. The patient did not expect the doctor to explain his/her illness not even the therapeutic strategy[2]. Nowadays, medical liability is an up-and-coming question.

With the progress of medical research and application of innovative technologies, a new study subject appeared - Bioethics - and with it novel ethical dilemmas, never questioned before, emerged. In 1970, Beauchamp and Childress proposed four ethical principles that should be part of medical practice: respect for autonomy, beneficence, non-maleficence and justice [3]. These principals might have influenced the raising of medical liability cases.

In the attribution of medical responsibility, five assumptions must be verified: (a) the *fact*, that could be either an action or an omission; (b) the *wrongfulness*, that does not follow absolute or legally protected rights; (c) the *fault* (*dolo*¹ or *neglect*²); (d) the

¹ The agent acts intentionally, thus, with knowledge and will to perform an illicit act.

harm (either economic and non-economic); (e) the *causality* between the fact (medical practice) and the harm.

The doctor may incur in three types of liability, which can coexist:

- a) Criminal: if the harm, according to law, can configure a crime; the Portuguese Penal Code considers certain types of crimes that can be attributed to doctors in the sequence of their practices, as “Manslaughter by negligence”, “Outrages upon personal integrity by negligence”, “Interventions and medical-surgical treatments which violate *leges artis*”, “Arbitrary interventions or medical-surgical treatments”, “Violation of professional secrecy”, “Improper use of secret”, “False certificate”, “Change of prescriptions”, “Doctor’s refusal”, “Abortion” and “Murder at the patient’s request” [4];
- b) Civil: which is applied when an agent, the accountable, has to repair another, the plaintiff, for the resulting harm [5]; so, it will involve the reparation of the personal harms (compensation of economic and non-economic harms, both temporary and permanent) and others (e.g., medical and hospital costs). It can be divided into *contractual responsibility* (when it results from violation of a right or failure to comply with a contract to provide services) and *extra-contractual* (when it results in violation of a duty or practice, that although licit, causes harm), depending whether the medical procedure is practiced under a private contractual relationship or within the national health service (NHS) [4, 6];

² The agent does not act with the necessary diligence. Neglect can be aware (when predicted an illicit result) or unaware (when the agent did not have the consciousness that his/her behavior could result in an illicit act).

c) Disciplinary: when there is any violation of the standards of care demanded in the medical practice. Disciplinary infractions are regulated by the Ethics' Statutes of the Medical Board Association, the Disciplinary Statutes and other internal regulations. The following disciplinary penalties may be taken [4]: (1) Warning (which applies to minor offenses); (2) Censorship (applicable to serious crimes which do not yet correspond to suspension or expulsion); (3) Suspension (applicable to cases of disobedience to determinations from the Medical Board Association and cases of violation of duties established by law or the Ethics' Code; (4) Expulsion (only applicable in three case scenarios: when the medical professional matches crimes punishable by imprisonment for more than three years, when there is notorious professional incompetence that endangers the health of patients or community, or when occurs concealment or participation in the infringement of the patient's personality rights). Additional accessory penalties may also be applied such as loss of wages or advertising of the sentence in the media. In Portugal, a doctor, in order to practice his/her profession, has to be registered in the Medical Board Association, which requires the fulfillment of statutes, code of ethics and internal regulations [6]. The violation of duties and obligations contained in these documents is appreciated by disciplinary councils; furthermore, the doctor, when employee of the Portuguese government is also subject to the disciplinary statute of the civil service, which conveys administrative disciplinary responsibility. The failure to fulfill the former statute is appreciated under administrative law[6].

According to the Portuguese law, the doctor has the *obligation of means*: the debtor practices a diligently activity for the benefit of the creditor. The result, therefore,

is not the object of obligation, even if the debtor undertakes to employ all means at its disposal to achieve it; in this case the patient has to provide the burden of proof [5]. Only in specific cases (e.g., esthetic surgery) prevails the *obligation of results* where the debtor agrees to a certain and determined result and is always to blame for the outcome if it is unsuccessful; in this case the doctor has to supply the burden of proof [7].

The *burden of proof* specifies that the plaintiff must provide all the needed evidence to sustain the claim. The principle of burden of proof *inversion*, under article 799, paragraph 1 of the Portuguese Penal Code, the debtor/doctor has to prove that the failure to perform or defective performance is not of his/her own fault, dispensing the lender/plaintiff to provide the relevant evidence [5].

The magnitude of medical liability

Currently, perception that medical litigation is an imminent problem is growing. As matter of fact, society, as well as health care professionals, is not yet prepared for its consequences [8]. Doctors feel obliged to justify their therapeutic decisions as they are frightened to do wrong, leading to an increase in defensive medicine [9]. Despite providing more information and allowing greater clinical safety in patient care, defensive medicine also increases medical costs [10] and nowadays, concern over NHS sustainability makes increasing medical costs questionable.

In Portugal, medical liability is one of the worst kept secrets [11]. In the last years, the medical class has been subjected to scrutiny by media, affecting doctor's dominant image, self-esteem and security[2]. There is a vast array of reasons why claims are increasing, namely cultural and socioeconomic development. This leads to an increasing awareness by the community on their rights, leading to a higher demand in treatment quality and privileged contribution to the medical decision process. Thus,

leaving the paternalistic vision and evolving to a balanced and contractual doctor-patient relationship[2]. According to the figure 1, it is evident an increasing number of cases arriving to the CML for technical-scientific assessment; whereas in 2001 there were only 50 cases, in 2010 there was a total of 141 cases (being 202 in 2008).

Specialties most involved in medical liability

According to a study performed in the United States of America (USA), the majority of claims occurred in surgical specialties. Among them, neurosurgery was estimated to be the most involved with 19.1% of neurosurgeons facing at least one claim per year. General surgery (GS) ranked third in overall, with 15.3% surgeons estimated to face medical litigation per year [12].

In another study completed by the *American Medical Association* between 2007 and 2008, the medical-surgical specialties with the greatest incidence of claims were GS and obstetrics/gynecology. According to this study, it was estimated that 69.2% of general surgeons were sued at least once during their career, while 14.3% had been sued at least once in last 12 months [13].

In Portugal, a national study performed between 2001 and the first half of 2005, concluded that the specialties that have raised far more medical liability questions were internal medicine (n=93; 29.1%), obstetrics (n=48; 15%) and general surgery (n=41; 12.8%) (Table 1) [5]. This study also added that the largest number of cases in internal medicine and GS were due to the fact that both are general triage specialties that cover, in first hand, most of the pathologies that lead to use of health care services [5].

Assessment of medical liability

Medical liability evaluation is intrinsically connected to the legal characteristics of each country. In the USA legal system is an adversarial system where lawyers are responsible for the information gathering. Thus, jury trial is a legal process during which the *jury*, a group of citizens, selected according to court's rules and with the contribution of both parties' lawyers, appreciates the evidence presented by both lawyers and issues an opinion. Between claim filling and trial, there is a lengthy process, in which, lawyers from both parties share information and try to reach a factual understanding. This process is facilitated by the requisition of documents, interrogatories and medical records. This is called "*the process of discovery*". In the majority of cases, an agreement between parties is reached long before trial. When an agreement is not reached, the claim is subject to a jury trial. The plaintiff's lawyer has to present the jury with the information gathered during the pretrial discovery process. This process of information exposition is moderated by a judge. The lawyer must use this information to convince the jury that it was more likely than not that the doctor was negligent. The "*more likely than not*" is the standard of legal proof required in American medical malpractice litigation. It is much less demanding than the usual "beyond reasonable doubt" standard legal requirement. Thus, medical responsibility in the USA is evaluated by the jury[1].

The English system is very similar to the USA one. Even though resort to trial is much less common as pre-trial mediation between the plaintiff's lawyer and the English NHS insurance service is usually successful. Germany, Sweden, Finland, Denmark and Norway have also similar characteristics to the American legal system, but in all these countries there is a pre-trial out-of-court mediation with an expert panel, where claims are referred to in the first place [1, 14]. Patients have the right to reject the outcome of

this mediation and request a jury trial. In France, there is only an out-of-court review board appointed by the regional government where patients can file a claim. There is no option to proceed to trial [1].

Southern European countries, namely Portugal and Italy, have an inquisitorial system, with judges' responsibility to analyze proofs and formulate an outcome [14]. Thus, in Portugal when presenting a judicial claim, the Public Prosecutor Office (PPO), according to Law 45/2004 of 19th August [15], demands a technical and scientific report to the National Institute of Legal Medicine (INML), which is sent to the Medico-Legal Council (CML). This council's functions include, among others: (a) advices on technical and scientific expertise; (b) advices on ethical questions; (c) monitoring and assessing activities carried out by experts of the INML; (d) advices on the models of cooperation between forensic services and other services or institutions; (e) developing recommendations about medico-legal activities. The CML is composed by the Directive Board of INML, a representative of the regional disciplinary boards of each regional section of the Medical Board, two university professors in Surgery, Internal Medicine, Obstetrics and Gynecology and Law, and one university professor in Pathology, Medical Law & Ethics, Orthopedics & Traumatology, Neurology, Neurosurgery and Psychiatry. The technical-scientific advices issued by the CML are incapable of being refuted, unless there is presentation of new evidence that justifies its reevaluation.

In general, the CML assessments take into consideration the respect for *leges artis*. *Leges artis* requires the agent to perform medical care with the most accurate conduct, according to the rules and procedures offered by medical science in a certain and concrete context. If *leges artis* has not been respected, evaluation of causality between the medical practice ("disrespect to *leges artis*") and the result (e.g., bodily harm) should be performed.

Objectives

The primary goal of this study is to evaluate current Portuguese situation on medico-legal liability in GS. Secondary goals are to contribute to characterize: (a) patients, health entities and professionals involved; (b) clinical cases; (c) conclusions of CML reports; (d) judicial outcomes concerning these cases; (e) the relevance of the CML reports in judicial outcomes.

Material and methods

We analyzed the reports of the CML related to alleged medical liability on GS, during 2001-2010, as well as their respective judicial outcomes.

The inclusion criteria were: (a) processes entered at the CML for reporting during 2001-2010; (b) related to GS; (c) patient older than 12 years old at the date of the facts, since this age gap is from the full responsibility of pediatric surgery; (d) cases questioning professional responsibility of a surgeon or of other health care professionals.

A questionnaire was applied to collect data. In order to ensure the reliability, the same single researcher was responsible for all the data collection. The study variables were divided into three sections: (a) characterization of the patient, health entity, involved professionals and clinical case; (b) characterization of the CML report; (c) characterizations of the judicial outcome.

Data for the first two section was obtained through the analysis of the CML reports (n=134), which authorization had previously been given by its president. These GS cases represented 11.2% of the total of cases analyzed in this period by the CML.

Data for the third section was obtained through the analysis of judicial decisions, which had been requested by letter sent to the PPO and/or courts. Only 47 decisions were received, representing 35.1% of the total of the selected cases.

The database and statistical analysis were performed using SPSS 18.0® for Windows. Statistical analysis was done using chi-square test to compare frequency distributions and student t-test to compare independent samples means. The significance level considered was less than 5%.

Results

Characterization of the patient

The majority of patients were male (n=71, 53%) and the mean age was 55.71 years old (Min.=13, Max.=87, SD=18.75). There was no significant difference in age between patient's gender (mean age 56.01 and 55.38 years old for males and females, respectively - $p>0.05$).

Most patients were married (59.7%), retired (43.3%), Portuguese (85.1%) and resident in the south of Portugal (35.1%) (Table 2).

The plaintiff was in 50% of cases the patient's son/daughter or spouse, and only in 16.4% the patient him/herself (Table 3).

In 108 cases (80.6%) there was a history of previous pathology. Co-morbidities more prevalent were cardiovascular (38%), gastrointestinal (30.1%) and metabolic (27.8%) (Table 4).

Characterization of the health entity and professionals involved

The majority of cases included a NHS hospital (80.6%) (Table 5).

In less than half of the all cases (n=59, 44%) it was possible to obtain information about the number of professionals involved. Of these, in 57.6% (n=34) only one professional was involved, in 27.1% (n=16) there were two and in 15.3% (n=9) more than two.

Most of health care professional were males (75.2%). There was no information about their age. In cases where involved professional's information was obtained, 76.9% were Portuguese, 93.8% doctors, 41.2% graduated assistants and 78.5% specialized in GS (Table 6).

The figure 2 shows the rate of cases that were observed in the various hospitals' level taking into account the number of visits to health care facilities until the event. In hospitals of B2 (serving a population of about 150,000 inhabitants, having the technical capacity to ensure more than 80% of the diversity of required care of this population [16]) most cases were in the first visit, with a small number in the second visit. In hospitals of type B1 (serving a population of about 250,000 to 300,000 inhabitants, having the technical capacity to respond to at least 85% of global community needs and serve as a reference hospital for B2 typology hospitals [16]) most cases were in a first visit, while only a small number happened in the second and third visit. The A2 hospitals (which have populations ranging between A1 and B1; they also serve as reference for the nearby B1 and B2 hospitals; these hospitals must meet at least 85 to 90% of the global population [16]) the first visit was mostly involved, though there was an increase in the number of second visits. In A1 hospitals (which serve a direct population of about 350,000 inhabitants, a reference population of more than 650,000 inhabitants; have technical capacities to ensure all the diversity of health care services [[16]) the proportion of first and second visits were similar, and there was an increase in third visits.

Characterization of the clinical cases

Most cases were related with natural disease (n=108, 80.6%), representing trauma 26 cases (19.4%).

In 55.2% (n=74) the patient was subjected to, at least, one surgical intervention. Of these, 56.8% (n=42) were subjected to only one surgical procedure, 29.7% (n=22) to two, and in the remainder 16% (n=10) more than two procedures.

There were 118 surgeries involved in litigation against a total of 2,871,113 GS surgical procedures performed in Portugal during the corresponding time period, according to information obtained from the *National Institute of Statistics*, a ratio of 4 claims per 100.000 surgeries performed in GS. Urgent or emergent surgeries correspond to 67.8% (n=80) of the total surgeries (Table 7).

Of all performed surgeries (n=118), the most involved areas of general surgery were hepatic-bilio-pancreatic (19.5%) and large bowel (19.5%) (Table 7). Regarding hepatic-bilio-pancreatic most surgeries were cholecystectomies - 17.4% (n=4) open cholecystectomy (OC) and 47.8% (n=11) laparoscopic cholecystectomy (LC); of these, 54.5% (n=6) involved bile duct injuries (including those of hepatic and portal vessels that occurred concomitantly), 18.2% (n=2) involved bowel injuries, 18.2% (n=2) involved major vascular injuries and 9.1% (n=1) corresponded to other causes.

In 75.4% of all cases, the patient died and in 12.7% suffered sequelae (Table 7).

The patients that survived were significantly younger than the remaining patients (45.3 ± 16.2 vs 58.9 ± 18.6 years, $p=0.001$).

The mortality rate of cases submitted to surgery was 69.4%. Death occurred in 54.5% (n=6) cases of LC. Of all fatal cases, sepsis was the most frequent conclusive cause of death written on the known death certificates (17.8%). Forensic autopsy,

performed in 57 cases (56.4% of the deaths), also revealed sepsis as the most frequent cause of death (31.6%) (Table 8).

Characterization of the CML reports

The annual number of GS cases under CML evaluation increased since 2003 (Figure 3).

Regarding the information provided by the CML reports, in 55.2% of the cases it was not admitted a causality nexus between the fact (medical practice) and the alleged harm (Table 9), and in 76.1% it was not considered the existence of violation of *leges artis* (Table 9).

Characterization of judicial outcome

According to the information contained in the CML reports, in the majority of the cases there was criminal responsibility imputed to health care professionals (Table 10).

Considering the claims, in 72 cases (53.7%) it was possible to obtain information regarding the alleged crimes involved, being the “negligent homicide” the more frequent (58.3%) (Table 10).

In 47 cases (35.1%) we had access to the judicial outcome. Of these, only in 3 cases (6.4%) health professionals were prosecuted (in a total of 8 doctors - 6 of GS) (Figure 5). The type of crime in the receipt of the complaint was in 66.7% (n=2) negligent homicide (art.137º of the Portuguese Penal Code) and in 33.3% (n=1) outrages upon personal integrity by negligence (art.148º of the Portuguese Penal Code). At the Criminal Court only 1 case (33.3%) was convicted, but another is still waiting for trial (Figure 5). The convicted case relates with an 83 years old male patient, widow and

retired, with previous pathologies, that died from undiagnosed complications of thoracic trauma, after 3 admissions at the hospital emergency department; 2 doctors were prosecuted (1 of GS and 1 general practitioner) and the general practitioner was convicted with a penalty of 250 days (14€ per day), corresponding to total payment of 3,500€ for negligent homicide and was ordered to pay compensation with the amount of property harm of 2,000€ and personal injury in value of 10,000€.

There was an agreement between the conclusions of the CML reports and the legal decision of PPO (Table 11). Regarding violation of *leges artis*, CML conclusions revealed: (a) strongly agreement (violation/prosecuted or no violation/filled) in 38 cases (80.9%); (b) agreement (inconclusive/filled or prosecuted) in 3 cases (6.4%); (c) disagreement (violation/filled) in 6 cases (12.8%). Relating to causality nexus, it was found that there was: (a) strongly agreement (full admitted/prosecuted, or not admitted/filled) in 31 cases (66%); (b) agreement (partially admitted or inconclusive/filled or prosecuted) in 11 cases (23.4%); (c) disagreement (full admitted / filled) in 5 cases (10.6%). The CML report conclusions, regarding both violation of *leges artis* and causality nexus, was found to significantly influence the PPO decision to prosecute (Chi-square test $p=0.005$ and $p=0.001$, respectively).

The mean delay between the year of the event and the CML report has been decreasing over the years, since 2001, when CML begun its activity - less than 20 months in the last for years (Figure 4).

The average time elapsed between dates of the event and the last judicial decision was 56.6 months (SD 30.44).

Discussion

In Portugal, there are no published studies about aspects of medical liability in General Surgery analyzed in a forensic setting.

In other similar American [17] and Belgian [18] studies, patients mean age was much lower, estimated at 38 and 47 years old, respectively, instead of 57 years old observed in our study. Although, these studies were not GS specific and children were included (as a matter of fact, 19% of the patients were less than 1 year old in the American study). In our study children under 12 years old were not included, as this age gap (0 to 12 years old), is usually from the responsibility of pediatric surgery, at least in A1 hospitals.

Patients' residency was located, predominantly, in south and north of Portugal, which are the national regions where the greatest urban centers are located, namely the metropolitan area of Lisbon and Oporto.

Most complaints involved patients who died (75%). This seems reasonable as when the result is death, people are less resigned and are in doubt whether the death was inevitable or due to any negligence or malpractice. The Portuguese reality is very different from the American one, in which of a total 1452 claims against doctors, only 26% resulted in death [17]. This discrepancy in associated mortality rates is most probably due to a lack of complain in non-deadly outcomes, representing roughly a quarter of our study cases, and not as a consequence of a worst medical system and medical care provided.

Major, minor or no sequelae were significantly associated with younger patients when compared to a deadly outcome. Nowadays, in the social media generation, patients are only one click away from accessing highly specific medical knowledge and as previously stated, leading to a shift in the doctor-patients relationship balance.

Patients demand to participate and be an active part the medical decision process, leaving less tolerance for errors and questioning the doctor's decision. Thus, it is not odd at all that younger patients, with far more knowledge to access information, might have a small patience for negative undesired consequences of the medical act leading them to sue doctors for progressively minor consequences. In order to more accurately characterize claims of possible medical malpractice in Portugal, it will be important to collect the future predictable wave of claims in non deadly outcomes. This will allow us to understand what the future will bring in medical liability.

Only half of the alleged patients were subjected to a surgical intervention. This may be due to several facts: (a) the surgery was not indicated; (b) the choice was a non-operative approach; (c) the surgical pathology may have gone unnoticed or misdiagnosed; (d) a decision not to perform surgery was made due to a predetermined tragic outcome. The absence of surgery might also lead the family to question if the surgery should have been performed and, consequently, fill a complaint. We observed that a large share of surgeries performed (67%) were either urgent or emergent, which was the complete opposite of the Belgian study [18], where elective surgeries corresponded to 76% of the surgeries performed; though, the latter study also involved other specialties, namely Plastic and Gynecologic Surgery. These specialties are associated to a large number of elective procedures. Furthermore, in the Belgian study the mortality rate of surgical procedures was 6% as compared to our study where a much higher mortality rate (69.4%) was noted, which is consonant with the high number of either urgent or emergent surgeries performed in the cases we analyzed.

During this period, in Portugal, according to the *National Statistic Institute*, the most frequently performed surgeries by organ were, in first place, the “small bowel and appendix”, second, the “liver, gallbladder, biliary tract and pancreas”, and third the

“large bowel and anus”. In our study, the surgeries by organ that led to most claims were the “liver, gallbladder, biliary tract and pancreas” (7 complaints per 100,000 performed surgeries) and the “large bowel and anus” (19 complaints per 100,000 performed surgeries) together with most claims, followed by the “esophagus and stomach” (10 complaints per 100,000 performed surgeries). This does not fully corroborate the hypothesis that the most frequently performed surgeries are those that are more often involved in litigation. In part, this discrepancy may be due to the technical difficulty of specific surgeries that predisposes them to more complications, like laparoscopic techniques widely used in surgeries to the hepatic-bile-pancreatic and esophageal-gastric systems, as well as the higher complexity and malignancy of the disease that leads to surgery.

Regarding cholecystectomies, the majority of claims occurred in laparoscopic procedures. These can be due to: (a) higher patient expectations for a quick and smooth recovery after LC; (b) failure of the surgeon to explain that laparoscopic procedures still has risks; (c) difficult in recognizing injuries at the time of the index operation [19]. In a study done in England involving claims related to LC, in 72% the reason for negative outcome was bile duct injury followed in 9% of cases by bowel injury [19]. Although small number differences exist between this study and ours, the relation order still stands similar in both studies, reflecting the major prevalence of bile duct injuries. However, in our study half of LC claims resulted from a deadly outcome, as compared of 9% observed in English study [19].

Most of the death cases had the cause of death listed as inconclusive at the Death Certificate (n=37). This shows us that doctors based in the clinical picture, were unable to determine the cause of death. Fortunately, in most cases the autopsy was able to conclude the cause of death. A conclusive autopsy result is far important to help the

CML understand the different aspects of the clinical case and decide if there was violation of the *leges artis* and if so, further establish whether or not, there was a causality nexus between the medical practice and the final result.

In Portugal, there is a national health system, which includes a network of hospitals, health centers and other entities, free of charge or with the payment of a charge providing health services to the entire population. The existence of a public healthcare system justifies why most events took place in the public hospital setting. Even though, the number of complaints relating to private hospitals would be expected to be higher, since patients have paid far higher values when compared with a patient who used the public NHS.

As we look into hospitals with more medical capabilities (A1) there is an increase in the number of revisit cases (two and three visits), which reflects the possibility that these hospital receive far more complex cases, many times referenced from smaller hospitals.

More than two thirds of surgeons were male. This is explained by the fact that the majority of general surgeons in Portugal are males (female/male ratio 1:4 according to the *Medical Board Association*) [20].

Although our study refers to GS alone, there were cases where the claim was also extended to other specialties; as GS is the core for other surgical specialties it is difficult to establish rigid boundaries between them. Some of the operations performed by general surgeons belong to other surgical specialties, including gynecology and vascular surgery. In less specialized centers, where there are few specialties, general surgeons may have to perform these and other procedures.

During the period of 2001-2010, the number of cases GS-related arriving to the CML to be reported per year increased. This raise in CML requests seems to be due, in

part, to the greater level of demand by the community. Cultural evolution has made patients less passive, taking an increasingly active role in the treatment decisions. As awareness of patient's rights increases, there is a greater tendency to question the medical act (Figure 3).

Finally, this study also aimed to evaluate the level of concordance between the reports of the CML and the judicial outcome. We acceded to judicial outcomes in 35% of cases, which is considered positive since in Portugal it is the first time such an analysis is performed. As seen in our results the CML decision clearly influences the PPO decision to prosecute or file, as under the Portuguese legal system the prosecutor does not have the technical skills or medical knowledge to decide alone if there was medical malpractice, he/she requires an opinion to the CML, which stands an multidisciplinary impartial and reliable entity.

In our study the average time between the event and resolution of the case was 4.3 years, which is slightly less than, although comparable to, the observed in an American study (mean time, 5 years) [17]. Furthermore, in our study 36% of cases took 6 or more years to conclude, a result very similar to the American study (33.3%) [17]. The number of filings was very high since in most cases there wasn't enough evidence to prove the malpractice. According to the 283th article of the Portuguese Penal Code, the public prosecutor decides to prosecute when during the investigation has been collected enough evidence that there has been a crime and who was its agent. It is considered that there is sufficient evidence so as long as it leads to a reasonable possibility that a penalty or a measure of security can be applied to the defendant by trial.

This study has some limitations: (a) we only had access to 35% of all the judicial outcomes requested; more judicial decisions are needed in order to achieve far more

correct conclusions; (b) the study is related only to GS, being difficult to compare results with other international studies which involve more medical and surgical areas; (c) there was a paucity of information regarding the health care professionals involved, which precluded their characterization; (d) if medical records were more fulfilled and complete it could have been possible to analyze more accurately the clinical case and even reach more conclusions.

The first step to really understand the Portuguese medical liability situation has already been given, with the creation of the CML. It allowed courts to ask for technical-scientific reports from a competent and reliable institution, gifted from the technical and knowledge skills necessary to deal with medical litigation. Although, there is still a long way to go, the exact problem still lies in the pyramid basis - doctors behavior. Doctors should understand that omission of the medical records is also a *violation of leges artis* and in the era of new technologies there is a vast array of tools that can help doctors to better record medical data. An improvement in medical records would help understanding and characterizing the event, protecting both parts in the case of medical litigation. It should be created a “culture of security within a culture of quality” [21].

In the future, new studies should be performed regarding error or technical misadventures in surgeries involved in medical litigation as in the *Harvard Medical Practice Study* [22] and *American College of Surgeons Study* [23]. The comprehension of adverse outcomes and the reasons behind them, should, in a behavioral and technical perspective, help health care professionals and health system prevent error and as a result decrease medical litigation.

Conclusions

The results of the study allow us to conclude that:

- a) In Portugal there are few cases of medical liability, although these have increased over the 10 years of study - 4:100,000 surgeries are subject to litigation;
- b) Alleged cases of medical liability in GS represent 11% of the total of cases analyzed at the CML;
- c) Portuguese citizens complain about the medical practice mainly when the result is death (75%);
- d) Surgeries were involved in 55% and the most implicated was laparoscopic cholecystectomy;
- e) The sense of CML reports is that it was not possible to admit a causality nexus and violation of *leges artis* in the majority of the cases (55% and 76%, respectively);
- f) The majority of suspected medical liability was filled because of the insufficient evidence to support a prosecution;
- g) The PPO prosecuted 8 doctors in 3 cases (6%), being only 1 convicted;
- h) The CML reports are an important technical-scientific tool for judicial decision; its reports significantly influenced the prosecutor decision ($p < 0.05$).

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Tables

Table 1 - Number of cases according to medical-surgical specialties involved in alleged medical liability cases in Portugal [5]

	n	%
Internal Medicine	93	29.1
Obstetrics	48	15.0
General Surgery	41	12.8
Neurology/Neurosurgery	24	7.5
Gynecology	21	6.6
Pediatrics	19	5.9
Orthopedics	15	4.7
Legal Medicine	12	3.8
Others	47	14.7

Table 2 - Characterization of the patient (n=134)

		n	%
Marital status	Married	80	59.7
	Single	19	14.2
	Widow	12	9.0
	Divorced	4	3.0
	Cohabiting	1	0.7
	Unknown	18	13.4
Nationality	Portuguese	114	85.1
	Foreigner	5	3.7
	Unknown	15	11.2
Residence	North	42	31.3
	Center	30	22.4
	South	47	35.1
	Islands	3	2.2
	Unknown	12	9.0
Professional activity	Retired	58	43.3
	Employed	34	25.4
	Housewife	9	6.7
	Student	6	4.5
	Unemployed	2	1.5
	Unknown	25	18.6

Table 3 - Characterization of the plaintiff (n=134)

	n	%
Son/daughter	33	24.6
Spouse	25	18.7
Patient him/herself	22	16.4
Spouse and son/daughters	8	6.0
Parents	8	6.0
Brother/sister	3	2.2
Spouse and parents	1	0.7
Grandson/grand daughter	1	0.7
Social worker	1	0.7
Unknown	32	23.8

Table 4 - History of previous pathology (n=108)

	n	%
Cardiovascular	41	38.0
Gastro-intestinal	33	30.1
Metabolic	30	27.8
Pulmonary	12	6.5
Neurological	9	11.1
Renal	9	11.1
Psychiatric	7	6.5
Gynecology	6	5.6
Urology	6	5.6
Vascular	6	5.6
Endrocrinological	6	5.6
Cerebrovascular	5	4.6
Infectious	4	3.7
Dependence	4	3.7
Reumathological	4	3.7
Ophthalmological	3	2.8

Table 5 - Characterization of health entity involved (n=134)

	n	%
Public hospital	101	75.4
Private hospital	14	10.4
Clinics	5	3.7
Health Care Center and Public Hospital	5	3.7
Clinics and Public Hospital	2	1.5
Health Care Center	1	0.7
Unknown	6	4.5

Table 6 - Characterization of professionals involved

		n	%
Nationality (n=101)	Portuguese	50	49.5
	Foreigner	15	14.9
	Unknown	36	35.6
Profession (n=101)	Doctor	90	89.1
	Nurse	5	5.0
	Unknown	6	5.9
Graduation (n=90)	Graduated Assistants	14	15.6
	Assistants	9	10.0
	Service Chiefs	7	7.8
	Interns/Residents	4	4.4
	Unknown	56	62.2
Specialty (n=90)	General Surgery	51	56.7
	Internal Medicine	3	3.3
	General Practice	3	3.3
	Anesthesiology	2	2.2
	Cardiothoracic surgery	2	2.2
	Plastic Surgery	1	1.1
	Gastroenterology	1	1.1
	Radiology	1	1.1
	Orthopedics	1	1.1
	Unknown	25	27.8

Table 7 - Characterization of the clinical cases

		n	%
Nature of procedure (n=118)	Urgent/Emergent	80	67.8
	Elective	38	32.2
Area of surgery (n=118)	Hepatic-bilio-pancreatic	23	19.5
	Large Bowel	23	19.5
	Esophagus-gastric	17	14.4
	Small Bowel	15	12.7
	Abdominal wall	12	10.2
	Peritoneal	12	10.2
	Cervical	5	4.2
	Vascular surgery	3	2.5
	Splenic	3	2.5
	Gynecology	2	1.7
	Thorax	2	1.7
	Lower limbs	1	0.9
Sequels (n=134)	Death	101	75.4
	Minor sequels	15	11.2
	Without sequels	13	9.7
	Major sequels	2	1.5
	Unknown	3	2.2

Table 8 - The cause of death according to death certificate and autopsy

		n	%
Death certificate (n=80)	Inconclusive	37	36.6
	Sepsis	18	17.8
	Multiorganic failure	9	8.9
	Hypovolemic shock	5	5.0
	Cerebrovascular complications	3	3.0
	Pulmonary thromboembolism	2	2.0
	Pneumonia	2	2.0
	ARDS	2	2.0
	Cardiovascular complications	1	1.0
	Peripheral vascular disease	1	1.0
	Unknown	21	20.8
Autopsy report (n=57)	Sepsis	18	31.6
	Hypovolemic shock	16	28.1
	Pneumonia	6	10.5
	Pulmonary thromboembolism	5	8.8
	Inconclusive	3	5.3
	Mesenteric ischemia	3	5.3
	Intestinal occlusion	3	5.3
	Cardiovascular complications	1	1.8
	Cerebrovascular complications	1	1.8
Multiorganic failure	1	1.8	

Table 9 - Conclusions of the CML reports (n=134)

		n	%
Causality between the fact and the harm	Not Admitted	74	55.2
	Full Admitted	27	20.1
	Inconclusive	20	14.9
	Partially admitted	13	9.7
Violation of <i>leges artis</i>	No	102	76.1
	Yes	20	14.9
	Inconclusive	12	8.9

Table 10 – Types of responsibility and alleged crimes

		N	%
Type of responsibility (n=134)	Criminal	96	71.6
	Criminal and Civil	17	12.7
	Criminal and Disciplinary	15	11.2
	Criminal, Civil and Disciplinary	4	3.0
	Civil	2	1.5
Alleged crimes (n=72)	Negligent homicide	42	58.3
	Interventions which violate <i>leges artis</i>	23	31.9
	Outrages upon personal integrity by negligence	22	30.6
	Arbitrary interventions	3	4.2
	False certificate	1	1.4
	Refusal by the doctor	1	1.4
	Abortion	1	1.4

Table 11 - Concordance of CML conclusions and PPO decisions (n=47)

CML conclusions		Public Prosecutor Office decision - n (%)		
		Filled	Prosecuted	Total
Violation of <i>leges artis</i>	Yes	6 (12.8)	2 (4.3)	8 (17.0)
	No	36 (76.6)	0 (0)	36 (76.6)
	Inconclusive	2 (4.3)	1 (2.1)	3 (6.4)
Causality nexus	Full admitted	5 (10.6)	3 (6.4)	8 (17.0)
	Partially admitted	3 (6.4)	0 (0)	3 (6.4)
	Not admitted	28 (59.6)	0 (0)	28 (59.6)
	Inconclusive	8 (17.0)	0 (0)	8 (17.0)

Figures

Figure 1 - Number of reports required to CML during 2001-2010 (n=1201)

Figure 2 - Hospital referral according to hospital level

Figure 3 – GS cases according to year of the CML report (n=134)

Figure 4 - Mean time between the date of the fact and the CML report by year of the event

Figure 5 - Characterization of judicial outcome

Figure 1

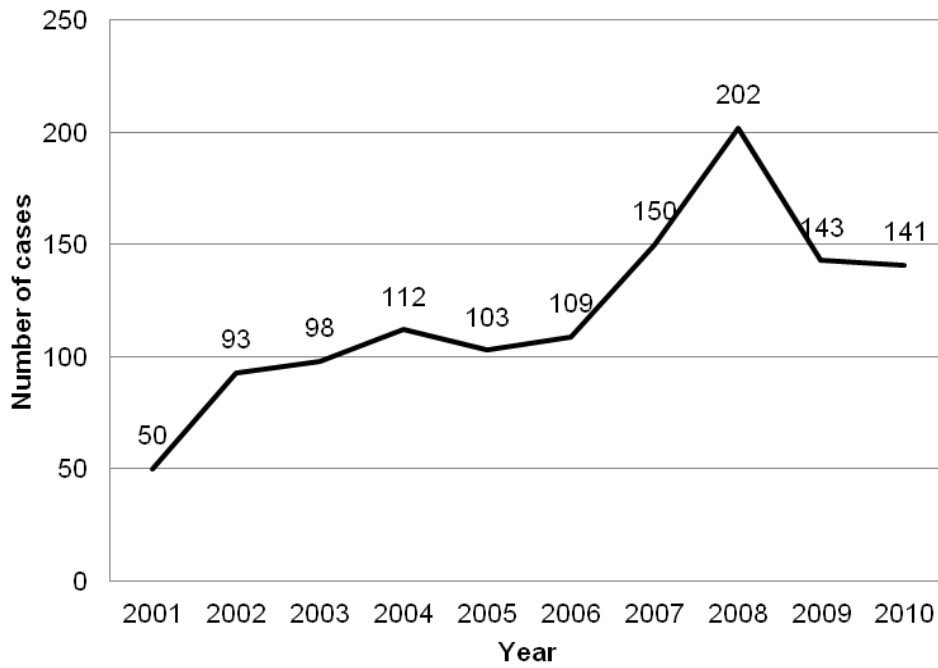


Figure 2

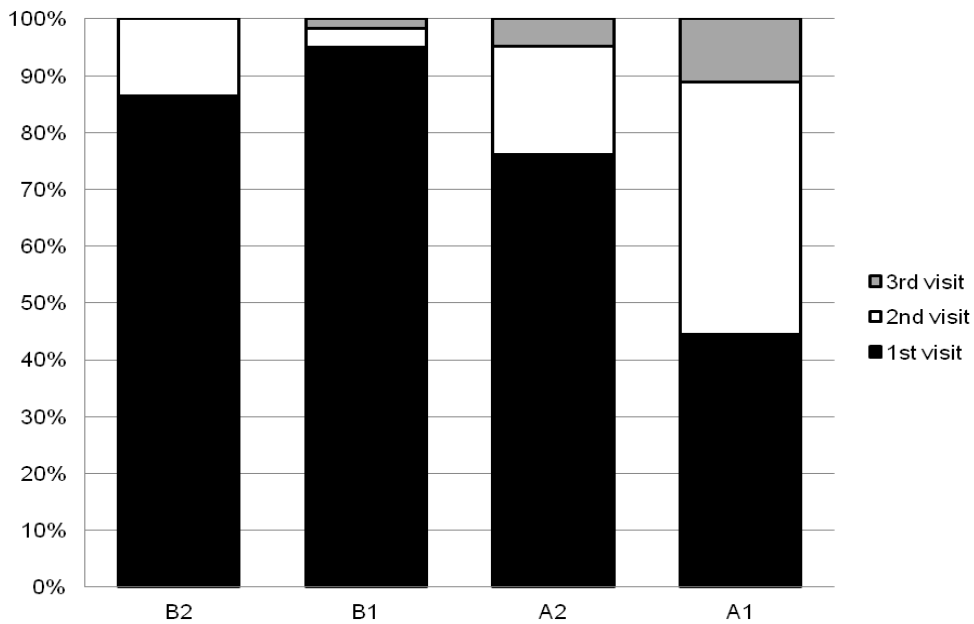


Figure 3

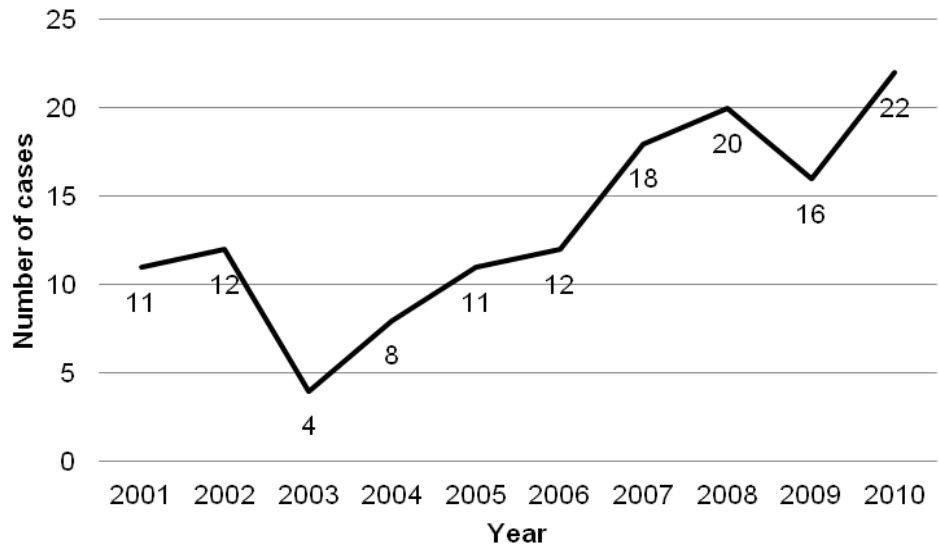


Figure 4

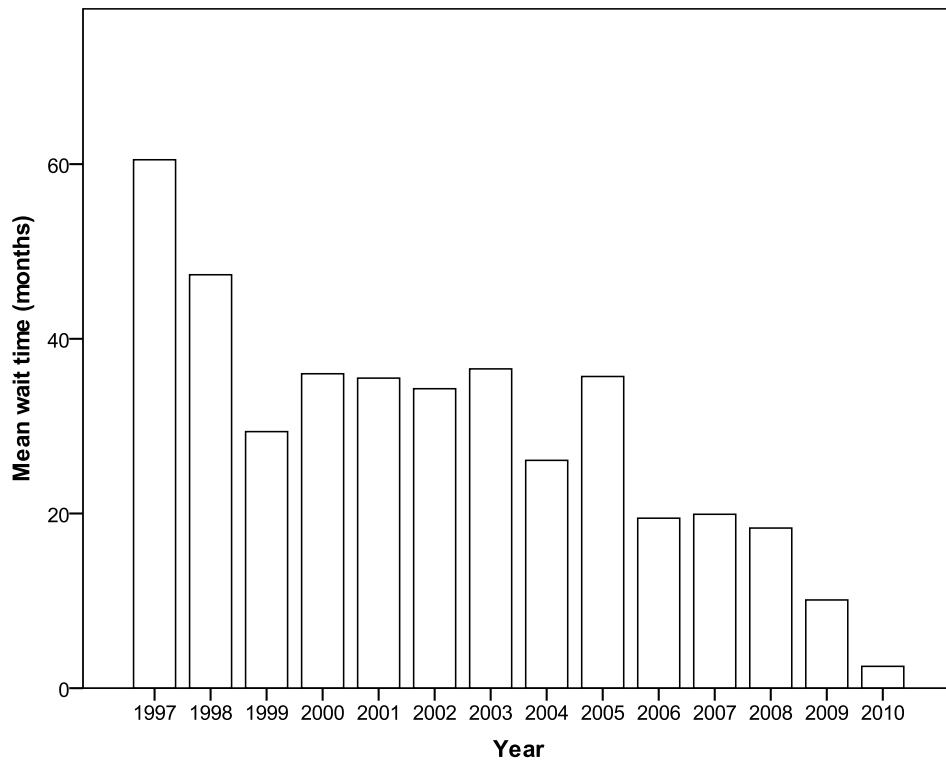
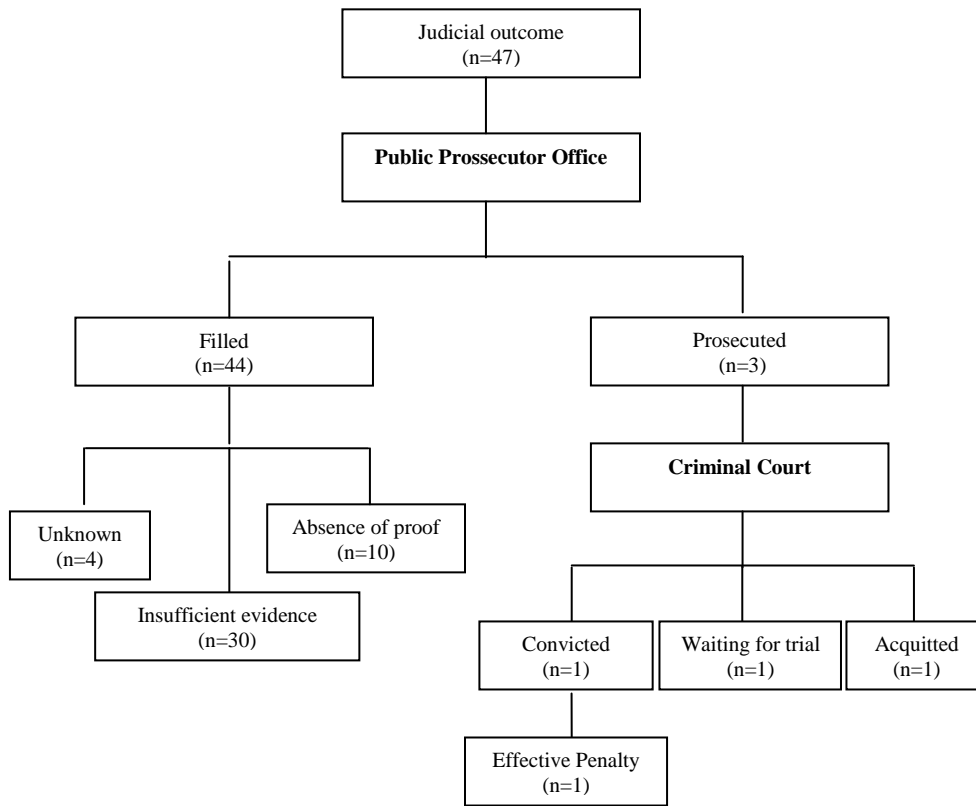


Figure 5



Anexos

1. Normas de Publicação da Revista World Journal of Surgery

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- The first and last names of all contributing authors and academic degrees [i.e., first name, middle initial(s), surname, degree(s)]; the departmental and institutional affiliation(s); complete street or mailing address for each affiliation, including the city, state or province, and country where the work was performed. [NOTE: Fellowships are not included in the Journal]
- **NO MORE THAN 6 AUTHORS WILL BE ACCEPTED FOR ALL MANUSCRIPTS WITHOUT A LETTER DETAILING EXPLICIT CONTRIBUTION TO ALL 3 PHASES OF AUTHORSHIP** (see “[Consensus Guideline on Manuscript Authorship](#)” below)
- Individual contributors who have not reached this level of contribution should be acknowledged at the end of the manuscript text.
- The complete name and address of the author to whom correspondence should be sent, as well as his/her phone number, fax number, and email address.
- A short title for use as a running head.

TITLE PAGE: The title page should include:

- The name(s) of the author(s)
- A concise and informative title
- The affiliation(s) and address(es) of the author(s)
- Trial registration number for randomized clinical trials (see “[Reporting of Randomized Clinical Trials](#)” above)
- Grant support for the research reported
- Potential and real conflicts of interest

ABSTRACT. A structured abstract of not more than 250 words is required. It should be a factual description of the study performed organized with the headings of Background (includes aims, hypotheses, or objectives), Methods (includes patient population, procedures, and data analysis), Results, and Conclusions. The abstract should contain the data to support the key findings or conclusions of the study. The first time an abbreviated term is used, spell it out in full and follow with the abbreviation in parentheses – for example: ultrasound (US).

TEXT. Organize the text into an introductory section that conveys the background and purpose of the report, and then into sections titled “Materials and Methods,” “Results,” and “Discussion.”

- Use a normal, plain font (e.g., 12-point Times Roman) for text
- Double-space the text
- Use italics for emphasis
- Use the automatic page numbering function to number the pages
- Do not use field functions
- Use tab stops or other commands for indents, not the space bar
- Use the table function, not spreadsheets, to make tables
- When required by the nature of the report, manuscripts that do not follow this specific format may be accepted.

ACKNOWLEDGEMENTS. A brief statement should acknowledge individuals, other than authors, who were of direct help in the reported work or if the work was supported by a federal or commercial grant. All acknowledged persons should give their written consent to being named in the manuscript. This consent is to be mailed to the Editorial Office at the address listed above. Please download and have the acknowledged persons complete the ACKNOWLEDGEMENT CONSENT FORM. To download the form, please go to www.springer.com/00268 and click on "Acknowledgement Consent Form".

REFERENCES. Reference citations in the text should be identified by numbers in brackets (e.g. [4])Number the references in order of their first appearance in the text (not alphabetically). Once a reference is cited, all subsequent citations should be to the original number. References may not appear in your Reference List unless they have been cited in the text or tables. Manuscripts that have been accepted for publication or are in press may be listed as references, but the Journal does not reference unpublished data and personal communications. Use the form for references adopted by the U.S. National Library of Medicine, as in Index Medicus. For each reference, show inclusive page ranges (e.g., 7-19).

In references to journal articles, please include (1) surname and initials (without periods) of the first three authors and et al for all others, (2) the year in parentheses, (3) title of article. (4) abbreviated Journal name, (5) volume number, and (6) inclusive page numbers, in that order. An example follows:

1. Honda T, Nozaki M, Isono N, et al (2001) Endoscope-assisted facial fracture repair. *World J Surg* 25:1075-1083

In references to books, please include (1) surname and initials (without periods) of the first three authors and et al. for all others, (2) chapter title, if any, (3) the year in parentheses, (4) editor(s), if any, (5) title of book, (6) publisher, (6) city of publication, and (7) inclusive page numbers. Volume and edition numbers, and name of translator should be included when appropriate. Examples follow:

1. Harlan BJ, Starr A, Harwin FM, Anesthesia for cardiac surgery (1996) In: *Illustrated Handbook of Cardiac Surgery*, Springer-Verlag, New York, p. 6-12
2. Jones MC, Smith RB, Treatment of gastric cancer (1976) In: Ford TL (ed) *Cancer of the Digestive System*, Springer-Verlag, Berlin, p. 140-154

TABLES:

- All tables are to be numbered using Arabic numerals
- Tables should always be cited in text in consecutive numerical order
- For each table, please supply a table heading
- The table title should explain clearly and concisely the components of the table
- Identify any previously published material by giving the original source in the form of a reference at the end of the table heading
- Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body

FIGURES (ILLUSTRATIONS)

- All figures are to be numbered using Arabic numerals
- Figure parts should be denoted by lowercase letters
- Figures should always be cited in text in consecutive numerical order
- For each figure, please supply a figure caption
- Make sure to identify all elements found in the figure in the caption
- Identify any previously published material by giving the original source in the form of a reference at the end of the caption
- Additional instructions for preparing your illustrations can be found [here](#).

Figures in which a person is identifiable must either have the face masked out, or be accompanied by written permission for publication from the individual in the photograph. Please complete our PHOTOGRAPHIC CONSENT FORM and return it to the Editorial Office at the address listed above. To download the form, please go to www.springer.com/00268 and click on "Photographic Consent Form".

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ABBREVIATIONS, DRUG AND PRODUCT NAMES, DIGITS. Please use the standard abbreviations and units listed in *Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers*, Sixth Edition (Reston, Va., Council of Biology Editors, 1994). The first time an abbreviated term is used, spell it out in full and follow with the abbreviation in parentheses – for example: ultrasound (US).

Generic names for drugs and chemicals should be used the first time the drug or chemical is mentioned in the text and, preferably, thereafter. The first reference to a drug or chemical in the text should be followed by the manufacturer name, city, state or province, and country – and, if you wish, the trade name – in parentheses. Please express digits as numerals except when they are the first word in a sentence. Decimals should be written in North American format. Express units of measurement in the metric system whenever possible, and abbreviate them when used with numbers.

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REVIEW AND ACTION. The editorial staff will examine the manuscripts and will customarily send them to appropriate experts. Authors will be notified as to the acceptability of a manuscript as rapidly as possible. The median time to the return of the first decision is between 40 and 50 days, however many manuscripts present great challenges to locate appropriate experts, and may take substantially longer to complete the review cycle.

DYNAMIC MANUSCRIPT SUBMISSION (I.E. STREAMING VIDEOS)

A dynamic manuscript is a print article with imbedded video material. Up to 3 (one minute maximum each) videos per manuscript submission will be accepted. Make sure to note in your manuscript the placement of the video clips. All standard instructions for manuscript and video submission should be followed for a dynamic manuscript submission.

- For dynamic articles, video clips should not exceed 3 minutes and each manuscript should not contain more than 3 video clips.
- Multimedia file for review and submission: MPEG-1 file with the largest frame size (usually 320 x 240 pixels) that will fit on a CD and will be playable on a Windows-based computer.
- The content of these files must be identical to that reviewed and accepted by the editors of World Journal of Surgery
- All narration should be in English.
- Generally, the video clip is used to support the technique description. Additional data regarding the results of the procedure described should be included with the manuscript.

AFTER ACCEPTANCE

Upon acceptance of your article you will receive a link to the special Springer web page with questions related to:

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AUTHOR PROOFS

After a submission is accepted and processed through production, a proof of the article is made available to the author. The purpose of the proof is to check for typesetting errors and the completeness and accuracy of the text, tables and figures. Substantial changes in content, e.g., new results, corrected values, title and authorship, are not allowed without the approval of the Editor.

The article will be published online after receipt of the corrected proofs. This is the official first publication citable with the DOI. After release of the printed version, the paper can also be cited by issue and page numbers. After online publication, further changes can only be made in the form of an Erratum, which will be hyperlinked to the article.

CONSENSUS STATEMENT ON SUBMISSION AND PUBLICATION OF MANUSCRIPTS

(Published in the June 2001 issue of World Journal of Surgery, page A7)

Increasing problems of duplicate and fraudulent submissions and publications have prompted the editors of surgical journals, including World Journal of Surgery, to support these overall principles of publication:

Duplicate Submission and Publication

In general, if a manuscript has been peer-reviewed and published, any subsequent publication is duplication. Exceptions to this general rule may be:

- a) Prior publication in meeting program abstract booklets or expanded abstracts such as those published by the Surgical Forum of the American College of Surgeons or Transplantation Proceedings. However, these must be referenced in the final manuscript.
- b) A manuscript which extends an original database (a good rule might be expansion by 50% or more) or which analyzes the original database in a different way in order to prove or disprove a different hypothesis. Previous manuscripts reporting the original database must, however, be referenced.
- c) Manuscripts which have been published originally in non-English language journals, provided that the prior publication is clearly indicated on the English language submission and referenced in the manuscript. In some circumstances, permission to publish may need to be obtained from the non- English language journal.

For example, any submission duplicating material previously published in full in "Proceedings" or book chapters is considered duplicate unless the exceptions in (a) above apply. Similarly, manuscripts dealing with subgroups of data (i.e., patients) that have previously been analyzed, discussed and published as a larger group are considered duplicate unless (b) above applies.

The Internet raises special concerns. If data have previously appeared on the Internet, submission of those data for publication is considered duplication. If Internet publication follows journal publication, the journal publication should be clearly referenced. Some journals may provide early Internet publication of accepted peer reviewed papers which are subsequently published in that journal. This does not constitute duplication if both manuscripts are identical and covered by the same single copyright.

Fraudulent Publication

The following activities are examples of fraudulent publication practices:

- a) Willful and knowing submissions of false data for publication.
- b) Submission of data from sources not the author's (or authors') own.
- c) Falsely certifying that the submitted work is original and has not been submitted to, or accepted by, another journal.
- d) Sponsoring or vouching for a manuscript containing data over which the sponsor has no control or knowledge.
- e) Allowing one's name to appear as an author without having contributed significantly to the study.
- f) Adding an author's name to a manuscript to which he/she has not contributed, or reviewed or agreed to in its current form.
- g) Flagrant omission of reference to the work of other investigators which established their priority.
- h) Falsification of any item on the copyright form.
- i) Failure to disclose potential conflict of interest with a sponsoring agency.

While not intended as an all-inclusive document, these examples and guidelines should alert authors to potential problems that should be avoided when they are considering submission of a manuscript to a peer-reviewed journal.

American Journal of Surgery–Kirby Bland M.D.

American Surgeon–Talmadge A. Bowden, Jr., M.D.

Annals of Surgery–Layton F. Rikkers, M.D.

Annals of Surgical Oncology–Charles M. Balch, M.D.

Archives of Surgery – Julie Frieschlag, MD

Current Surgery–Walter J. Pories, M.D.

Digestive Surgery–Eduard H. Farthmann, M.D., Markus W. Büchler, M.D.

Diseases of the Colon & Rectum–Victor Fazio, M.D.

Journal of the American College of Surgeons–Seymour Schwartz, M.D.

Journal of Gastrointestinal Surgery–John L. Cameron, M.D., Keith A. Kelly, M.D.

Journal of Japan Medical Association–Yasuo Idezuki, M.D.

Journal of Japan Society for Endoscopic Surgery–Yasuo Idezuki, M.D.

Journal of Japan Surgical Association–Yasuo Idezuki, M.D.

Journal of Pediatric Surgery–Jay Grosfeld, M.D.

Journal of Surgical Research–Wiley W. Souba, M.D., David W. McFadden, M.D.

Journal of Thoracic and Cardiovascular Surgery–Andrew S. Wechsler, M.D.

Journal of Vascular Surgery–Robert B. Rutherford, M.D., K. Wayne Johnston, M.D.

Journal of Parenteral and Enteral Nutrition–Danny O. Jacobs, M.D.

Journal of Trauma–Basil A. Pruitt, Jr., M.D.

Surgery–Andrew L. Warshaw, M.D., Michael Sarr, M.D.

Surgical Endoscopy–Bruce V. MacFadyen, Jr., MD, Sir Alfred Cuschieri, M.D.

Surgical Laparoscopy, Endoscopy and Percutaneous Techniques–Carol E.H. Scott-Conner, M.D., Ph.D., Maurice Arregui, M.D.

World Journal of Surgery–John G. Hunter, M.D.

Zentralblatt für Chirurgie–Albrecht Encke, M.D.

CONSENSUS STATEMENT ON SURGERY JOURNAL AUTHORSHIP – 2006

In the majority of clinical and research studies submitted to surgery journals for possible publication, many individuals participate in the conception, execution, and documentation of each of those works.

However, recognition of work in the form of authorship has varied widely. This consensus statement is being issued to clarify and define the criteria for surgical journal authorship.

The following guidelines should be used to identify individuals whose work qualifies them as authors as distinct from those who are contributors to the work under consideration. All persons designated as authors should qualify for authorship, and all those who qualify should be so credited.

A. Authorship Criteria

Individuals claiming authorship should meet all of the following 3 conditions:

- 1) Authors make substantial contributions to conception and design, and/or acquisition of data, and/or analysis and interpretation of data;
- 2) Authors participate in drafting the article or revising it critically for important intellectual content; and
- 3) Authors give final approval of the version to be submitted and any revised version to be published.

Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. Allowing one's name to appear as an author without having contributed significantly to the study or adding the name of an individual who has not contributed or who has not agreed to the work in its current form is considered a breach of appropriate authorship.

Acquisition of funding, collection of data, contributing cases, or general supervision of the research group, of itself, or just being the Chair of the department does not justify authorship if the above criteria are not fulfilled.

B. Order of Authors

The order of authorship on the byline should be a joint decision of the co-authors. Authors should be prepared to explain the order in which authors are listed.

C. Multi-Center Studies

When a large, multi-center group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript. These individuals should fully meet the criteria for authorship defined above and editors will ask these individuals to complete journal-specific author and conflict of interest disclosure forms. When submitting a group-author manuscript, the corresponding author should clearly indicate the preferred citation and should clearly identify all individual authors as well as the group name.

D. Contributors Listed in Acknowledgments

All contributors who do not meet the criteria for authorship should be listed in an acknowledgments section. Examples of those who might be acknowledged include: individuals who allowed their clinical experience (i.e., cases) to be included, a person who provided purely technical help, writing assistance, or a department Chair who provided only general support. Financial and material support should also be acknowledged. Groups of persons who have contributed materially to the paper but whose contributions do not justify authorship may be listed under a heading such as "clinical investigators" or "participating investigators," and their function or contribution should be described - for example, "served as scientific advisors," "critically reviewed the study proposal," "collected data," or "provided and cared for study patients." Because readers may infer their endorsement of the data and conclusions, all persons listed as contributors must give written permission to be acknowledged.

E. In Conclusion

This consensus statement is intended as a basic guide for authors. In the interest of promoting the highest ethics in surgical publishing and the surgical sciences, we ask that authors take these criteria into careful consideration when submitting a manuscript to a peer-reviewed surgical journal.

This statement is being simultaneously published in the respective journals of the members of the Surgical Journal Editors Group, as follows:

American Journal of Surgery: Kirby I. Bland, MD

The American Surgeon: Talmadge A. Bowden, Jr. MD

Annals of Surgery: Layton F. Rikkers, MD

Annals of Surgical Oncology: Charles M. Balch. MD

Annals of Thoracic Surgery: L. Henry Edmunds, Jr., MD

Archives of Surgery: Julie Freischlag, MD

British Journal of Surgery: John Murie, MD
Canadian Journal of Surgery: Garth L. Warnock, MD, James P. Waddell, MD
Current Surgery: John A. Weigelt, MD
Digestive Surgery: Markus Büchler, MD, John Neoptolemos, MD
Diseases of the Colon and Rectum: Victor Fazio, MD
Journal of the American College of Surgeons: Timothy J. Eberlein, MD
Journal of Burn Care and Research: Richard Gamelli, MD
Journal of Gastrointestinal Surgery: John Cameron, MD, Keith Kelly, MD
Journal of the Japan Medical Surgical Assoc: Yasuo Idezuki, MD
Journal of Laparoendoscopic & Advanced Surgical Techniques: Mark Talamini, MD
Journal of Parenteral and Enteral Nutrition: Charles Van Way, III, MD
Journal of Pediatric Surgery: Jay Grosfeld, MD
Pediatric Surgery International: Arnold G. Coran, MD, Prem Puri, MD
Journal of Pelvic Medicine and Surgery: Robert D. Madoff, MD
Journal of Plastic & Reconstructive Surgery: Rod J. Rohrich, MD
Journal of Surgical Research: David McFadden, MD, Wiley W. Souba, MD
Journal of Trauma: Basil A. Pruitt, Jr, MD
Journal of Thoracic & Cardiovascular Surgery: Andrew S. Wechsler, MD
Journal of Vascular Surgery: Jack L. Cronenwett, MD, James M. Seeger, MD
Surgery: Andrew L. Warshaw, MD, Michael Sarr, MD
Surgical Endoscopy: Bruce V. MacFadyen, Jr, MD, Alfred Cuschieri, MD
Surgical Laparoscopy, Endoscopy & Percutaneous Techniques: Maurice E. Arregui, MD, Carol Scott-Conner, MD
World Journal of Surgery: John G. Hunter, MD
Zentralblatt für Chirurgie: Hans Lippert, MD

This Consensus statement was adapted from the International Committee of Medical Journal Editors Uniform Requirements for Manuscripts Submitted to Biomedical Journals. For more information: <http://www.icmje.org/index.html>

Artwork instructions:

For the best quality final product, it is highly recommended that you submit all of your artwork – photographs, line drawings, etc. – in an electronic format. Your art will then be produced to the highest standards with the greatest accuracy to detail. The published work will directly reflect the quality of the artwork provided.

- Electronic Figure Submission

Supply all figures electronically.

Indicate what graphics program was used to create the artwork.

For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. MS Office files are also acceptable.

Vector graphics containing fonts must have the fonts embedded in the files.

Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.

- Line Art

Definition: Black and white graphic with no shading.

Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.

All lines should be at least 0.1 mm (0.3 pt) wide.

Scanned line drawings and line drawings in bitmap format should have a minimum resolution of 1200 dpi.

Vector graphics containing fonts must have the fonts embedded in the files.

- Halftone Art

Definition: Photographs, drawings, or paintings with fine shading, etc.

If any magnification is used in the photographs, indicate this by using scale bars within the figures themselves.

Halftones should have a minimum resolution of 300 dpi.

- Combination Art

Definition: a combination of halftone and line art, e.g., halftones containing line drawing, extensive lettering, color diagrams, etc. Combination artwork should have a minimum resolution of 600 dpi.

- Color Art

Color art is free of charge for online publication.

If black and white will be shown in the print version, make sure that the main information will still be visible. Many colors are not distinguishable from one another when converted to black and white. A simple way to check this is to make a xerographic copy to see if the necessary distinctions between the different colors are still apparent.

If the figures will be printed in black and white, do not refer to color in the captions.

Color illustrations should be submitted as RGB (8 bits per channel).

- Figure Lettering

To add lettering, it is best to use Helvetica or Arial (sans serif fonts).

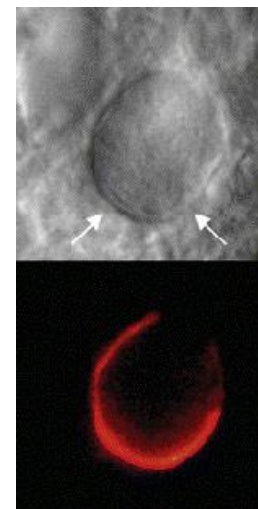
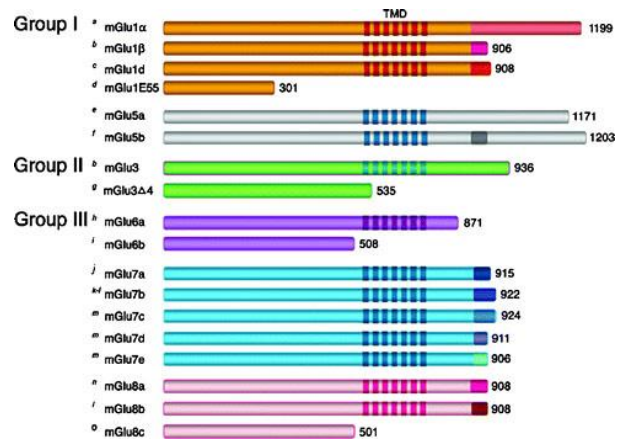
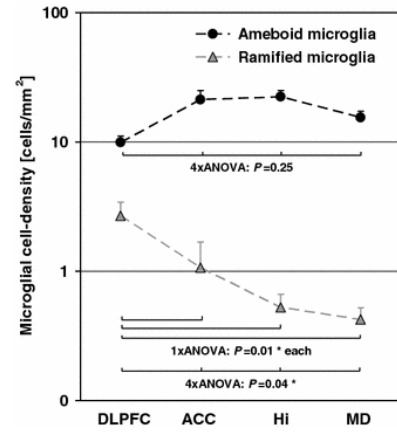
Keep lettering consistently sized throughout your final-sized artwork, usually about 2–3 mm (8–12 pt).

Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.

Avoid effects such as shading, outline letters, etc.

Do not include titles or captions within your illustrations.

- Figure Numbering



All figures are to be numbered using Arabic numerals.

Figures should always be cited in text in consecutive numerical order.

Figure parts should be denoted by lowercase letters (a, b, c, etc.).

If an appendix appears in your article and it contains one or more figures, continue the consecutive numbering of the main text. Do not number the appendix figures, "A1, A2, A3, etc." Figures in online appendices (Electronic Supplementary Material) should, however, be numbered separately.

- **Figure Captions**

Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, not in the figure file.

Figure captions begin with the term **Fig.** in bold type, followed by the figure number, also in bold type.

No punctuation is to be included after the number, nor is any punctuation to be placed at the end of the caption.

Identify all elements found in the figure in the figure caption; and use boxes, circles, etc., as coordinate points in graphs.

Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

- **Figure Placement and Size**

When preparing your figures, size figures to fit in the column width.

For most journals the figures should be 39 mm, 84 mm, 129 mm, or 174 mm wide and not higher than 234 mm.

For books and book-sized journals, the figures should be 80 mm or 122 mm wide and not higher than 198 mm.

- **Permissions**

If you include figures that have already been published elsewhere, you must obtain permission from the copyright owner(s) for both the print and online format. Please be aware that some publishers do not grant electronic rights for free and that Springer will not be able to refund any costs that may have occurred to receive these permissions. In such cases, material from other sources should be used.

- **Accessibility**

In order to give people of all abilities and disabilities access to the content of your figures, please make sure that

All figures have descriptive captions (blind users could then use a text-to-speech software or a text-to-Braille hardware)

Patterns are used instead of or in addition to colors for conveying information (color-blind users would then be able to distinguish the visual elements)

Any figure lettering has a contrast ratio of at least 4.5:1

Apêndice

1. Requerimento para consulta dos ficheiros do Conselho Médico Legal

04.04.2011 11.40 FAX 924 24400070 INML-DEL-FORMA 7 000-1101110 4091

*mta
voad a qm, confians
infute de confidencialidade,
e da disposiçõ "seu"
legim e plicar
Ao CD para contarmto.*

09/07/2011

Data de Entrada	22/11
Nº de Entrada	2455
Processo Nº	

Viso em sentido de
O Presidente do Conselho
(Duarte Nuno Vieira)

O Presidente
(Duarte Nuno Vieira)

Exmo. Senhor
Prof. Doutor Duarte Nuno Vieira
Digno. Presidente do Conselho Médico-Legal
do Instituto Nacional de Medicina Legal, I.P.

Helena Miguel Fernandes Nogueira Moreira, estudante do 5º ano do mestrado integrado em Medicina da Faculdade de Medicina da Universidade do Porto, a elaborar o projecto de dissertação sob orientação do Professor Doutor António Taveira Gomes e co-orientação da Professora Doutora Teresa Magalhães, vem por este meio solicitar a V. Exa. autorização para consultar relatórios do Conselho Médico Legal no que diz respeito a processos de responsabilidade médica em cirurgia geral, relativos aos anos de 2001 a 2010, inclusive.

Compromete-se, caso seja superiormente autorizado, a consultar os referidos relatórios na Delegação do Centro do INML, I.P., bem como a manter total sigilo e anonimato quanto aos dados colhidos, em cumprimento da legislação em vigor no INML, I.P. no que diz respeito ao acesso a relatórios médico-legais para fins de investigação.

Pede deferimento.

A requerente

Helena Miguel Fernandes Nogueira Moreira
(Helena Miguel Fernandes Nogueira Moreira)

2. Formulário de Recolha de Dados

RESPONSABILIDADE PROFISSIONAL EM CASOS DE CIRURGIA GERAL. ANÁLISE DA SITUAÇÃO PORTUGUESA

Formulário de recolha de dados

1. CARACTERIZAÇÃO DO PROCESSO

1.1. Nº processo judicial _____

1.2 Entidade que requer o parecer em primeira linha

1.2.1. Ministério Público

1.2.2. Tribunal Judicial

1.2.3. Outra

1.2.4. Sem informação

(Designação e endereço:

1.3 Nº processo CML _____

1.4 Data de solicitação do parecer 1 ao CML ____/____/____

1.5 Data da aprovação do parecer 1 no CML ____/____/____

1.6 Data de solicitação do parecer 2 ao CML ____/____/____

1.7 Data da aprovação do parecer 2 no CML ____/____/____

1.8 Data de solicitação do parecer 3 ao CML ____/____/____

1.9 Data da aprovação do parecer 3 no CML ____/____/____

1.10 Data de solicitação do parecer 4 ao CML ____/____/____

1.11 Data da aprovação do parecer 4 no CML ____/____/____

2. CARACTERIZAÇÃO DA ALEGADA VÍTIMA (À DATA DA OCORRÊNCIA)

2.1 Sexo

2.1.1 Feminino

2.1.2 Masculino

2.1.3. Sem informação

2.2 Data de Nascimento ____/____/____

2.3. Idade à data dos factos _____ anos/meses

2.4. Estado civil

2.4.1. Solteiro/a

2.4.2. Casado/a

2.4.3. União de facto

2.4.4. Separado/a, mas ainda legalmente casado

2.4.5. Divorciado/a

2.4.6. Viúvo/a

2.4.7. Sem informação

2.5 Nacionalidade

- 2.5.1 Portuguesa
- 2.5.2 Estrangeira
- 2.5.3 Dupla nacionalidade
- 2.5.4 Sem informação

2.6 Distrito de residência

- 2.6.1 Aveiro
- 2.6.2 Beja
- 2.6.3 Braga
- 2.6.4 Bragança
- 2.6.5 Castelo Branco
- 2.6.6 Coimbra
- 2.6.7 Évora
- 2.6.8 Faro
- 2.6.9 Guarda
- 2.6.10 Leiria
- 2.6.11 Lisboa
- 2.6.12 Portalegre
- 2.6.13 Porto
- 2.6.14 Santarém
- 2.6.15 Setúbal
- 2.6.16 Viana do Castelo
- 2.6.17 Vila Real
- 2.6.18 Viseu
- 2.6.19 Região Autónoma dos Açores
- 2.6.20 Região Autónoma da Madeira
- 2.6.21 Sem informação

2.7 Escolaridade

- 2.7.1 Sem
- 2.7.2 4º ano
- 2.7.3 6º ano
- 2.7.4 9º ano
- 2.7.5 Ensino secundário
- 2.7.6 Curso de especialização tecnológica
- 2.7.7 Ensino Superior
- 2.7.8. Ensino Especial
- 2.7.9 Sem informação

2.8 Atividade profissional

- 2.8.1 Empregado/a
- 2.8.2 Desempregado/a
- 2.8.3 Estudante
- 2.8.4 Doméstico/a
- 2.8.5 Reformado/a ou na reserva
- 2.8.6 Outra _____
- 2.8.7 Sem informação

2.9 Profissão (se empregado/a)

- 2.9.1. Quadros Superiores da Administração Pública, Dirigentes e Quadros Superiores de Empresas
- 2.9.2. Especialistas das Profissões Intelectuais e Científicas
- 2.9.3. Técnicos e Profissionais de Nível Intermédio
- 2.9.4. Pessoal Administrativo e Similares
- 2.9.5. Pessoal dos Serviços e Vendedores
- 2.9.6. Agricultores e Trabalhadores Qualificados da Agricultura e Pescas
- 2.9.7. Operários, Artífices e Trabalhadores Similares
- 2.9.8. Operadores de Instalações e Máquinas e Trabalhadores da Montagem
- 2.9.9. Trabalhadores não Qualificados
- 2.9.10. Membros das forças armadas
- 2.9.11. Outra _____
- 2.9.12. Sem informação

2.10. Antecedentes patológicos/traumáticos relevantes

- 2.10.1 Sim
- 2.10.2 Não
- 2.10.3 Sem informação

2.11 Se antecedentes patológicos/traumáticos relevantes

- 2.11.1. _____
- 2.11.2. _____

- 2.11.3. _____
- 2.11.4. _____
- 2.11.5. _____
- 2.11.6. _____
- 2.11.7. _____

2.12. Se antecedentes patológicos/traumáticos relevantes – Classificação ASA

- | | |
|-----------------|--------------------------------|
| 2.12.1. ASA I | 2.12.4. ASA IV |
| 2.12.2. ASA II | 2.12.5. ASA V |
| 2.12.3. ASA III | 2.12.6. Não é possível avaliar |

3. ENTIDADE QUE APRESENTA QUEIXA:

- | | |
|-------------|--------------------|
| 3.1 Cônjuge | 3.5 Irmãos |
| 3.2 Filho | 3.6 Outro: _____ |
| 3.3 Neto | 3.7 Sem informação |
| 3.4 Pais | |

4. CARACTERIZAÇÃO DO(S) PROFISSIONAIS (À DATA DOS FACTOS)

4.1. Nº de profissionais alegadamente envolvidos

- 4.1.1. _____
- 4.1.2. Sem informação

4.2. Profissional 1

- | | |
|---|---|
| 4.2.1. Sexo (escolha múltipla) | 4.2.5.1. Médico(a) |
| 4.2.1.1. Feminino | 4.2.5.2. Enfermeiro(a) |
| 4.2.1.2. Masculino | 4.2.5.3. Outra |
| 4.2.1.3. Sem informação | 4.2.5.4. Sem informação |
| 4.2.2. Nacionalidade (escolha múltipla) | 4.2.6. No caso do(s) profissional(is) ser(em) médico(s)
– Graduação (escolha múltipla) |
| 4.2.2.1. Portuguesa | 4.2.6.1. Interno |
| 4.2.2.2. Estrangeira | 4.2.6.2. Assistente |
| 4.2.2.3. Dupla nacionalidade | 4.2.6.3. Assistente Graduado |
| 4.2.2.4. Sem informação | 4.2.6.4. Chefe de Serviço |
| 4.2.3. Entidade empregadora do(s) profissional(is) em
causa (escolha múltipla) | 4.2.6. 5. Sem informação |
| 4.2.3.1. Hospital público | 4.2.7. Área de especialização (escolha múltipla) |
| 4.2.3.2. Hospital privado | 4.2.7.1. Esofago-gástrica |
| 4.2.3.3. Centro de saúde | 4.2.7.2. Hepato-bilio-pancreática |
| 4.2.3.4. Clínica/Consultório | 4.2.7.3. Colo-retal |
| 4.2.3.5. Sem informação | 4.2.7.4. Tireoide |
| 4.2.4. Nome da entidade empregadora:
_____ | 4.2.7.5. Mama |
| 4.2.5. Profissão do(s) profissionais envolvidos (escolha
múltipla) | 4.2.7.6. Não tem |
| | 4.2.7.7. Sem informação |
| | 4.2.8. Anos de experiência profissional |

4.2.8.1. ____ (anos)

4.2.8.2. Sem informação

4.3. Professional 2

4.3.1. Sexo (escolha múltipla)	4.3.5.2. Enfermeiro(a)
4.3.1.1. Feminino	4.3.5.3. Outra
4.3.1.2. Masculino	4.3.5.4. Sem informação
4.3.1.3. Sem informação	4.3.6. No caso do(s) profissional(is) ser(em) médico(s)
4.3.2. Nacionalidade (escolha múltipla)	– Graduação (escolha múltipla)
4.3.2.1. Portuguesa	4.3.6.1. Interno
4.3.2.2. Estrangeira	4.3.6.2. Assistente
4.3.2.3. Dupla nacionalidade	4.3.6.3. Assistente Graduado
4.3.2.4. Sem informação	4.3.6.4. Chefe de Serviço
4.3.3. Entidade empregadora do(s) profissional(is) em causa (escolha múltipla)	4.3.6.5. Sem informação
4.3.3. 1. Hospital público	4.3.7. Área de especialização (escolha múltipla)
4.3.3. 2. Hospital privado	4.3.7.1. Esofago-gástrica
4.3.3. 3. Centro de saúde	4.3.7.2. Hepato-bilio-pancreática
4.3.3. 4. Clínica/Consultório	4.3.7.3. Colo-retal
4.3.3. 5. Sem informação	4.3.7.4. Tiroide
4.3.4. Nome da entidade empregadora:	4.3.7.5. Mama
_____	4.3.7.6. Não tem
4.3.5. Profissão do(s) profissionais envolvidos (escolha múltipla)	4.3.7.7. Sem informação
4.3.5.1. Médico(a)	4.3.8. Anos de experiência profissional
	4.3.8.1. ____ (anos)
	4.3.8.2. Sem informação

4.4. Professional 3

4.4.1. Sexo (escolha múltipla)	4.4.3.5. Sem informação
4.4.1.1. Feminino	4.4.4. Nome da entidade empregadora:
4.4.1.2. Masculino	_____
4.4.1.3. Sem informação	4.4.5. Profissão do(s) profissionais envolvidos (escolha múltipla)
4.4.2. Nacionalidade (escolha múltipla)	4.4.5.1. Médico(a)
4.4.2.1. Portuguesa	4.4.5.2. Enfermeiro(a)
4.4.2.2. Estrangeira	4.4.5.3. Outra
4.4.2.3. Dupla nacionalidade	4.4.5.4. Sem informação
4.4.2.4. Sem informação	4.4.6. No caso do(s) profissional(is) ser(em) médico(s)
4.4.3. Entidade empregadora do(s) profissional(is) em causa (escolha múltipla)	– Graduação (escolha múltipla)
4.4.3.1. Hospital público	4.4.6.1. Interno
4.4.3.2. Hospital privado	4.4.6.2. Assistente
4.4.3.3. Centro de saúde	4.4.6.3. Assistente Graduado
4.4.3.4. Clínica/Consultório	4.4.6.4. Chefe de Serviço

- | | |
|--|---|
| 4.4.6.5. Sem informação | 4.4.7.5. Mama |
| 4.4.7. Área de especialização (escolha múltipla) | 4.4.7.6. Não tem |
| 4.4.7.1. Esofago-gástrica | 4.4.7.7. Sem informação |
| 4.4.7.2. Hepato-bilio-pancreática | 4.4.8. Anos de experiência profissional |
| 4.4.7.3. Colo-retal | 4.4.8.1. ____ (anos) |
| 4.4.7.4. Tireoide | 4.4.8.2. Sem informação |

4.5. Professional 4

- | | |
|--|---|
| 4.5.1. Sexo (escolha múltipla) | 4.5.5.2. Enfermeiro(a) |
| 4.5.1.1. Feminino | 4.5.5.3. Outra |
| 4.5.1.2. Masculino | 4.5.5.4. Sem informação |
| 4.5.1.3. Sem informação | 4.5.6. No caso do(s) profissional(is) ser(em) médico(s) |
| 4.5.2. Nacionalidade (escolha múltipla) | – Graduação (escolha múltipla) |
| 4.5.2.1. Portuguesa | 4.5.6.1. Interno |
| 4.5.2.2. Estrangeira | 4.5.6.2. Assistente |
| 4.5.2.3. Dupla nacionalidade | 4.5.6.3. Assistente Graduado |
| 4.5.2.4. Sem informação | 4.5.6.4. Chefe de Serviço |
| 4.5.3. Entidade empregadora do(s) profissional(is) em causa (escolha múltipla) | 4.5.6.5. Sem informação |
| 4.5.3.1. Hospital público | 4.5.7. Área de especialização (escolha múltipla) |
| 4.5.3.2. Hospital privado | 4.5.7.1. Esofago-gástrica |
| 4.5.3.3. Centro de saúde | 4.5.7.2. Hepato-bilio-pancreática |
| 4.5.3.4. Clínica/Consultório | 4.5.7.3. Colo-retal |
| 4.5.3.5. Sem informação | 4.5.7.4. Tireoide |
| 4.5.4. Nome da entidade empregadora: | 4.5.7.5. Mama |
| _____ | 4.5.7.6. Não tem |
| 4.5.5. Profissão do(s) profissionais envolvidos (escolha múltipla) | 4.5.7.7. Sem informação |
| 4.5.5.1. Médico(a) | 4.5.8. Anos de experiência profissional |
| | 4.5.8.1. ____ (anos) |
| | 4.5.8.2. Sem informação |

4.6. Professional 5

- | | |
|--|--|
| 4.6.1. Sexo (escolha múltipla) | 4.6.3.1. Hospital público |
| 4.6.1. 1. Feminino | 4.6.3.2. Hospital privado |
| 4.6.1. 2. Masculino | 4.6.3.3. Centro de saúde |
| 4.6.1. 3. Sem informação | 4.6.3.4. Clínica/Consultório |
| 4.6.2. Nacionalidade (escolha múltipla) | 4.6.3.5. Sem informação |
| 4.6.2. 1. Portuguesa | 4.6.4. Nome da entidade empregadora: |
| 4.6.2. 2. Estrangeira | _____ |
| 4.6.2. 3. Dupla nacionalidade | 4.6.5. Profissão do(s) profissionais envolvidos (escolha múltipla) |
| 4.6.2. 4. Sem informação | 4.6.5.1. Médico(a) |
| 4.6.3. Entidade empregadora do(s) profissional(is) em causa (escolha múltipla) | 4.6.5.2. Enfermeiro(a) |

- 4.6.5.3. Outra
- 4.6.5.4. Sem informação
- 4.6.6. No caso do(s) profissional(is) ser(em) médico(s)
 - Graduação (escolha múltipla)
 - 4.6.6.1. Interno
 - 4.6.6.2. Assistente
 - 4.6.6.3. Assistente Graduado
 - 4.6.6.4. Chefe de Serviço
 - 4.6.6.5. Sem informação
- 4.6.7. Área de especialização (escolha múltipla)
 - 4.6.7.1. Esofago-gástrica
 - 4.6.7.2. Hepato-bilio-pancreática
 - 4.6.7.3. Colo-retal
 - 4.6.7.4. Tireoide
 - 4.6.7.5. Mama
 - 4.6.7.6. Não tem
 - 4.6.7.7. Sem informação
- 4.6.8. Anos de experiência profissional
 - 4.6.8.1. ____ (anos)
 - 4.6.8.2. Sem informação

5. CARACTERIZAÇÃO DO CASO CLÍNICO EM CAUSA

5.1. Data dos factos

5.1.1. ____/____/_____

5.1.2. Sem informação

5.2. Situação clínica em causa

5.2.1. Traumatismo

5.2.2. Doença natural

5.2.3. Outra _____

5.2.4. Sem informação

5.3. Se estiver em causa um procedimento cirúrgico - Prioridade estabelecida

5.3.1. Urgente (até 48 horas)

5.3.3. Eletivo

5.3.4. Outra _____

5.3.5. Sem informação

5.4. Se estiver em causa um procedimento cirúrgico. Qual?

5.4.1. _____

5.4.2. _____

5.4.3. _____

5.4.4. _____

5.5. Tempo de espera até à realização de eventual procedimento cirúrgico

5.5.1. _____ (horas/dias)

5.5.2. Sem informação

5.6. Consequências

5.6.1. Sem sequelas

5.6.2. Sequelas *minor*

5.6.3. Sequelas *major*

5.6.4. Morte

5.7. Causa de morte de acordo com o Certificado de Óbito:

5.8. Se foi requerida autópsia, qual a sua conclusão:

6. CARACTERIZAÇÃO DO PARECER DO CONSELHO-MÉDICO-LEGAL

6.1. Nexos de causalidade entre os factos e os danos

- 6.1.1. Admitido
- 6.1.2. Admitido parcialmente
- 6.1.3. Não admitido
- 6.1.4. Não conclusivo
- 6.1.5. Sem informação

6.2. Violação da *legis artis*

- 6.2.1. Sim
- 6.2.2. Não
- 6.2.3. Não conclusivo
- 6.2.4. Sem informação

7. CARACTERIZAÇÃO DO DESENVOLVIMENTO PROCESSUAL E DA DECISÃO JUDICIÁRIA E JUDICIAL

7.1. Tipo de processo/responsabilidade em causa (escolha múltipla)

- 7.1.1. Criminal
- 7.1.2. Civil
- 7.1.3. Disciplinar
- 7.1.4. Outro _____
- 7.1.5. Sem informação

7.2. Se respondeu 7.1.1 no ponto 7.1 - Tipo legal de crime em causa

- 7.2.1. Homicídio por negligência (artigo 137.º do Código Penal)
- 7.2.2. Ofensas à integridade física por negligência (artigo 148.º do Código Penal)
- 7.2.3. Intervenções e tratamentos médico-cirúrgicos (artigo 150.º do Código Penal)
- 7.2.4. Intervenções e tratamentos médico-cirúrgicos arbitrários (artigo 156.º do Código Penal)
- 7.2.5. Violação de segredo profissional (artigo 195.º do Código Penal)
- 7.2.6. Aproveitamento indevido de segredo (artigo 196.º do Código Penal)
- 7.2.7. Atestado falso (artigo 260.º do Código Penal)
- 7.2.8. Alteração de receituário (artigo 283.º do Código Penal)
- 7.2.9. Recusa de médico (artigo 284.º do Código Penal)
- 7.2.10. Aborto (artigo 140.º do Código Penal)
- 7.2.11. Homicídio a pedido da vítima, i.e., eutanásia (artigo 134.º do Código Penal)
- 7.2.12. Outro _____
- 7.2.13. Sem informação

7.3. Decisão do Ministério Público

- 7.3.1. Arquivamento
- 7.3.2. Acusação

7.3.3. Outra _____

7.3.4. Sem informação

7.4. Se respondeu 7.3.1 no ponto 7.3, qual o motivo:

7.4.1. Prova insuficiente

7.4.2. Ausência de prova

7.4.3. Sem informação

7.5. Se respondeu 7.3.2 no ponto 7.3 - Tipo legal de crime na acusação

7.5.1. Homicídio por negligência (artigo 137.º do Código Penal)

7.5.2. Ofensas à integridade física por negligência (artigo 148.º do Código Penal)

7.5.3. Intervenções e tratamentos médico-cirúrgicos (artigo 150.º do Código Penal)

7.5.4. Intervenções e tratamentos médico-cirúrgicos arbitrários (artigo 156.º do Código Penal)

7.5.5. Violação de segredo profissional (artigo 195.º do Código Penal)

7.5.6. Aproveitamento indevido de segredo (artigo 196.º do Código Penal)

7.5.7. Atestado falso (artigo 260.º do Código Penal)

7.5.8. Alteração de receituário (artigo 283.º do Código Penal)

7.5.9. Recusa de médico (artigo 284.º do Código Penal)

7.5.10. Aborto (artigo 140.º do Código Penal)

7.5.11. Homicídio a pedido da vítima, i.e., eutanásia (artigo 134.º do Código Penal)

7.5.12. Outro _____

7.5.13. Sem informação

7.6. Decisão judicial

7.6.1. Requerimento de Instrução

7.6.2. Pronúncia

7.6.3. Não pronúncia

7.6.4. Desistência

7.6.5. Julgamento

7.6.6. Recurso

7.6.7. Sem informação

7.7. Se julgamento (resposta 5 no ponto 43) - Sentença

7.7.1. Absolvição

7.7.2. Pena suspensa _____

7.7.3. Pena efetiva _____

7.7.4. Medida de segurança _____

7.7.5. Processo não concluído

7.7.6. Sem informação

7.8. Data da sentença judicial

7.8.1. ____/____/_____

7.8.2. Processo não concluído

7.8.3. Sem informação

7.9. Se recurso - Medida de pena

7.9.1. Absolvição

7.9.2. Pena suspensa _____

7.9.3. Pena efetiva _____

7.9.4. Medida de segurança _____

7.9.5. Sem informação

3. Consentimento para nomeação nos Agradecimentos

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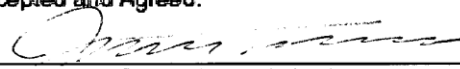
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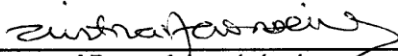
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Cristina Cordeiro

Name of Person Acknowledged (please print)

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Vitor Palmeira

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