ABSTRACT

Intoxications happen every time a toxic level of a xenobiotic (XB) is reached. They lead to the search for health facilities, being responsible for emergency hospital care to save the patient life. They might be fatal and therefore they should be studied, prevented.

This thesis, entitled “CARACTERIZAÇÃO E PREVALÊNCIA DE XENOBIÓTICOS EM VÍTIMAS FATAIS SUJEITAS A AUTÓPSIA NA DELEGAÇÃO DO NORTE DO INSTITUTO NACIONAL DE MEDICINA LEGAL, I.P DE 2007 A 2008”, arises as a request to obtain a master degree in Forensic Sciences.

In the first part of this thesis, Part I, we make a brief review of the literature in what concerns to some concepts of Toxicology, especially Forensic Toxicology, what enables us to understand the interpretation of the analytical results. We established the state of the art of intoxications in all world and in Portugal. At last, we emphasise the substances more frequently involved in intoxications (fatal or not) and some of their characteristics in terms of toxicokinetic and toxicodinamic.

In Part II, we justify and define the aims, establishing “the study of XBs prevalence in the fatal victims being autopsied on the North Branch of the Nacional Institute of Legal Medicine (INML), I.P. and in the Legal Medicine Offices of their dependence, as the propose of this thesis. To characterize those intoxications we made a review of the cases, occurred in 2007 and 2008, of the Forensic Toxicology Department of the North Branch of the INML, I.P.. We targeted the cases which had at least one positive toxicological analysis, taking note of the XBs detected and his concentration, in this way understanding the prevalence of XBs in fatal cases. Then, we characterised the cases of fatal intoxication victims autopsied in the Forensic Pathology Departement in what concern to gender, age, etiology of death, route of administration and xenobiotics responsible to the death.

Part III corresponds to the retrospective work, where we describe the methodology used in data analyses and we present the results.

At last, in Part IV we discuss the results and present the conclusions about the prevalence of XBs in fatal cases being autopsied in the North Branch of INML, I.P. and his Legal Medicine Offices. The characteristics of fatal intoxications autopsied in the North Branch of the INML, I.P., and relation between those characteristics and other statistical studies conclusions about intoxications, were also discussed.