



G83 Child Abusive Head Trauma in Portugal

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The goal of this presentation is to better understand how child Abusive Head Trauma (AHT) is managed in Portugal.

This presentation will impact the forensic science community by filling the void of epidemiology background concerning fatal AHT in Portugal, and will allow comprehensive knowledge of the Portuguese experience on this issue. Only then will it be possible to develop assertive and coordinated policies and strategies for action in this field in order to minimize the number of cases as well as its consequences. Until now, in Portugal, only isolated and non-articulated studies have been made on this issue, reflecting only loco-regional incidences or even only the numbers of one organization. For these reasons, it is not possible to infer what is really going on at a national level.

The absence of a systematic approach on child abuse (CA) makes it impossible to have the real knowledge of the prevalence and incidence of this problem in the Portuguese population. Currently there are no more than estimates of certain entities, certainly underestimating, from the Ministry of Justice, the *National Commission for the Protection of Children and Young People at Risk* (CNCJR), the *National Institute of Legal Medicine* (INML), the criminal police forces, the victims' support associations, or the health care services. Furthermore, the most important problem is that the referred data represents only a portion of incidences because frequently cases are not reported. However, gathering such sort of data is vital in order to find the proper and most suitable approach to these situations in Portugal.

In AHT cases, it was verified that in the last years there has been an important increase in the number of published reports in the international medical literature describing AHT (Hymel KP, 2002) and considering that it represents the most frequent cause of death due to CA, the main cause of traumatic death in children under 1-year-old (Duhaime AC e col, 1999) and the cause of significant morbidity, with up to 50% of survivors having permanent neurologic sequelae (Duhaime AC e col, 1996). Between 24% and 33% of traumatic brain injuries (TBI) hospital admissions in children under 2-years-of-age are from AHT (Duhaime AC e col, 1987; Dashti SR e col, 1999). The incidence of severe inflicted TBI in Scotland is 24.6 infants per 100 000 person-years which is comparable with epidemiologic data in the United States, where this incidence is 29.7 infants per 100 000 person years (Barlow KM, Minns RA, 2003; Keenan HT e col, 2003). In fact, it is known that for AHT up to 30% of the cases are difficult to be initially recognized (Jenny C e col, 1999), mainly because victims, almost under 2-years-of-age, cannot describe the abuse (Bechtel K e col, 2004), and because many cases are of mild or moderate severity (Berger RP e col, 2004).

However, in spite of all these difficulties, the various forms of AHT (including shaken baby syndrome (SBS)) are now well recognized and diagnosed in most countries (Barlow KM e col, 2005) which cases are being identified and reported; however, doesn't seem to be the case in Portugal. The intervention in a situation of CA can be initiated by multiple kinds of professionals of different institutions. Among those professionals teachers, childhood educators, physicians (mostly pediatricians, practitioners, and gynecologists), nurses, psychologists, policemen/women, and social workers are highlighted. According to the Portuguese Criminal Law these professionals are mandatory reporters

and according to the Protective Law and the Deontological Code (in what physicians concern), they have the duty to report suspected cases. The problem is that there are numerous initial referral sources, multiple professionals (with different formations and awareness, presenting possible "prejudices" and non-official instructions and forms for reporting cases).

In Portugal there are no published data concerning non-fatal AHT, and this work represents the first national approach regarding fatal cases due to this kind of abuse. Analyzing the fatal cases of suspected CA observed in the medico-legal services of Portugal, between 2005 and 2008, it has been verified that AHT represented only 12.5% of the suspected CA causes of death (1.2 infants per 100,000 person years), despite in the literature, AHT represents the most frequent cause of death due to CA. The single diagnosed case of SBS will be presented.

These Portuguese results must be carefully analyzed and compared with other foreign studies, which are completely different. According to the facts, it is presumed that an important number of cases of AHT is still undiagnosed or underdiagnosed in Portugal (being diagnosed only when specifically looked for), or remain



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unreported or underreported by the health professionals.

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