



Pathology Biology Section – 2010

G55 Accidental Drowning Deaths in a Coastal Region of South India – A Ten Year Study

Tanuj Kanchan, MD, Kasturba Medical College, Department of Forensic Medicine, Light House Hill Road, Mangalore, 575 001, INDIA*

After attending this presentation, attendees will identify with the pattern and trend of drowning deaths in a coastal region of South India. This presentation will impact the forensic science community by developing an understanding of the burden of accidental drowning in the coastal region and to develop preventive strategies so that precious human lives are saved.

Accidental drowning constitutes a significant public health problem that is often neglected in our country. This study will describe the epidemiology and pattern of accidental drowning deaths in Manipal, a coastal region in South India. This study is a registry based descriptive research spanning over a period of ten years from January 1998 to December 2007. All medicolegal autopsy case records were retrospectively reviewed and the cases of death due to drowning were studied. The information obtained from autopsy reports, police investigations and toxicological analysis was registered in a database and analyzed. All deaths where the manner was recorded as suicidal or homicidal were excluded from the study.

During the study period forty cases of drowning deaths were reported. Males accounted for 82.5% of cases, male- female ratio being 4.7:1. Majority of the victims were in 2nd and 3rd decades, together accounting for 55% of drowning deaths followed by children in the first decade (15%). Fresh water drowning was reported in 70% cases. Rivers constituted the most common sites of drowning (35%) followed by sea (27.5%). Wells, canals, lakes, ponds, and water tanks were the other sites of drowning. Most (87.5%) victims of drowning were found dead. The remaining five cases died in hospitals later on. The maximum period of stay in hospital before a fatal outcome was three and a half days. Most of the accidental drownings (45%) were reported in the post monsoon period. Nearly one-third (30%) of the total drowning deaths were reported in the years 2006 and 2007.

Drowning is a major global public health problem which is amenable to prevention. The study highlights the pattern of accidental drowning deaths in Manipal, a coastal region of South India. Morbidity and mortality due to drowning can be prevented by understanding its epidemiology, common patterns and educating people about prevention. This is especially when hindsight often shows that many deaths from drowning are preventable.

Drowning, Accidents, South India