

# Forensic Science Science International

An international journal dedicated to the applications of medicine and science in the administration of justice

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# Forensic Science International

**VOLUME 136/SUPPL. 1 (2003)** 

# **Proceedings of the 3rd European Academy of Forensic Science Meeting**

September 22–27, 2003 Istanbul, Turkey



AMSTERDAM — LONDON — NEW YORK-OXFORD — PARIS — SHANNON — TOKYO

large and heavy in proportion to his or her body. For this reason, when a baby is dropped or thrown, he or she will tend to land on his head. 2. There is space between the brain and skull to allow for growth and development. 3. Babies' neck muscles and ligaments are weak and not fully developed. The problem is the many cases of SBS go unidentified because of the absence of external injuries, no witnesses to the event, and the failure of the abuser to admit his or her actions. In our paper we would like to present our experience in cases of SBS. We would describe tree cases with bleeding and contusion of brain and nervus opticus. In all tree cases children were injured by mothers.

Keywords: Child Abuse, Baby Shaken Syndrome, CNS

### MED-WP-35 Forensic Medicine Evaluation of Early Pubescence

Alvydas Pauliukevicius and \*Romas Raudys, Institute of Forensic Medicine, Verkiu 7-110, Vilnius, 2024, Lithuania.

The laws of the Republic of Lithuania foresee criminal responsibility for having sexual relations with an immature person. In our country the pubescence begins approximately at 14 years of age and finishes at 18 years of age. The prosecution applied to the Institute of Forensic Medicine of Lithuania. They brought a 12 year old girl. The main problem that forensic medicine experts had to solve was to decide if the girl was pubescent. Usually experts of the Institute of Forensic Medicine define the pubescence of 14 - 18 year old persons and the persons under 14 are considered to be juvenile and not pubescent. But this case was exceptional - the girl had already borne and was raising a healthy child. During the investigation all the necessary medical information about the girl's state of health since her birth was gathered. It turned out that at the time when the girl was 1.5 years old her breasts began to grow and menstrual bleeding started. Since that time the girl had been examined and treated in the best hospitals of Lithuania and the former Soviet Union, she had undergone all the advanced medical testing as the doctors were trying to find an explanation to the signs of such an early pubescence. After having performed all the testing no tumors of pituitary gland or other pathology was discovered. The results of testing of her endocrine system and X-ray of bones reminded of those characteristic to elderly people. At last a rare diagnosis was made - idiopathic premature pubescence (pubertas praecox idiopatica). At present she is successfully raising her child, none troubles of the young mother and child's health has been observed. But at that time the issue under discussion was if the child's father had to be accused (at present he takes care and keeps the family). Forensic medicine experts had to solve a difficult problem - how to behave in such a situation.

Keywords: Child abuse, Premature Pubescence, Young mother

### MED-WP-36

# Neonaticidium In Republic Of Macedonia Forensicomedical Aspects

\*Zdravko Cakar, Aleksandar Stankov, Aleksandra Gutevska and Goran Pavlovski, Institute of Forensic Medicine and Criminology. Medical faculty, University "St Cyril and Methodius" - Skopje, Republic Macedonia str. Vodnjanska no 19 1000 Skopje Republic of Macedonia.

Neonaticidium have existed in all epochs. It is always accompaniment with many different' social reactions and different ways of sanctions, as of historical also of geographical dimensions and so leading down to unsanctioned common low even to corporal punishment. Neonalicidium in Republic of Macedonia is sanctioned and it's noted in the 127 article of the Criminal low with the following contents: the mother with will deprive from life her child during the birth or immediately after, in the situation of derangement provoked

with the birth will be punish... In this study ore processed solely the medico forensic aspects of neonaticidium in the Republic of Macedonia. We analyzed 326 autopsies of neonates cases at the Institute of forensic medicine at the Medical Faculty of Skopje in the period of 1964-2000 year, which present average 8,81 case for one year. The most frequent way of carrying out of action is different ways of violent asphyxia, mechanical injuries which means active action. The passive neonaticidium is present with little percentage. The village regions because of old fashioned relations ant the level of civilization, is the most frequent place for neonaticidium. At the most number of cases the act is covered up with burring in the ground or with throwing in the water, septic tanks, trash cans and etc. It is to emphasize the fact that in recent ten years the number of the cases is significant reduced. This occurrence can be explained exclusive with forensic medical expert-opinion. Although neonaticidium with it's number doesn't represent deadly occurrence with own dimension of destroying the weak and dependent beings it will be always of interest not only for the court but also for the wide

Keywords: Neonaticidium active, Passive crimes scene



### MED-WP-37

### Urea and Creatinine as a Possible Drowning Indicator

\*Ani Dika, Ana Trifunova, Natasa Davceva, Biljana Janeska and Suzana Petrovska, Institute for Forensic Medicine and Criminology, Vodnjanska 19, 1000 Skopje, R. Macedonia.

Forensic determination of drowning as causal mortis on the basis of specific and unspecific signs of drowning can represent a problem especially at cases of drowning took out of water after specific period.

Besides of the method for determination of diatoms presence, which is used at the Institute for Forensic Medicine and Criminalistics in Skopje, the question is set whether the determination of concentration of urea and creatinine can also contribute in the posing of differential diagnosis.

Some data in the literature show that in some cases of drowning in fresh water, as a result of haemodilution, there is a difference in the concentration of certain biochemical parameters in the blood from the left and right heart chamber.

The purpose of this work is to evaluate the importance of determination of the difference in the urea and creatinine level in the blood took from the right and left heart chamber as an indicator for haemodilution in cases of drowning in fresh water.

In a one-year period 10 cases of drowning are analyzed as well as 10 non-drowning control cases, autopsied at the Institute for Forensic Medicine and Criminalistics in Skopje.

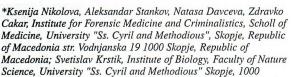
In the work are presented the results of the examination, the statistical processing and it was discussed the certainty of the application of this method in the determination of the cause of death in cases of drowning.

Keywords: Urea, Creatinine, Drowning

Skopje. Republic of Macedonia.

### MED-WP-38

### Presence of Diatoms in an Event of Natural Death



Diatoms, although often denied as one of reliable signs for drowning, together with other findings may help in determining the drowning as death cause. This shows a case where a dead woman is found

