**Sudden Infant Death Syndrome**

**Definition**

Sudden Infant Death Syndrome, or SIDS, is the unexpected death of an infant that is less than 1 year old and usually whose cause of death is not obvious before it is investigated (CDC, 2017).

**Epidemiology (age groups)**

Most cases of SIDS occur to babies who are between 1 month and 4 months old. Most cases of SIDS (90%) occur before a baby turns 6 months old. However, it can occur anytime before the baby is 1 month old (NICHD, 2017).

**Risk Factors**

Risk factors for babies include sleeping on their stomachs, on soft surfaces or under soft or loose beddings. It is also dangerous for them to get too hot during sleep. Exposure to cigarette smoke while the baby is in the womb or from their immediate environment after being born will also contribute to the occurrence of SIDS. Moreover, other risk factors include sleeping while being covered with a blanket, sharing the bed with more than one person, or being young than 14 months of age (NICHD, 2017). Infants who sleep on their stomachs are practicing a major risk factor because they experience a sudden reduction in blood pressure as well as heart rate. As they experience less movement and longer deep sleeps, they become more prone to SIDS (NICHD, 2017).

A study in July 2017 published in the *Proceedings of the National Academy of Sciences* stated that elevated serotonin could be a risk factor for SIDS. Serotonin regulates breathing, and in 61 babies who died of SIDS, serotonin levels were found to be high. This could mean that the children may have been suffering from brain abnormalities that increased and could not decrease the baby's serotonin levels. It could also be an abnormality in serotonin metabolism (Lafrance, 2017).

**Most Frequent Causes**

The most frequent causes of SIDS include suffocation by the soft or loose bedding, an overlay of a person on an infant while sleeping, wedging or entrapment such as when an infant is trapped between two objects like the mattress and the wall, and strangulation like the infant's neck caught between the crib railings (CDC, 2017).

The triple-risk model determines the usual cause of death by SIDS. First, the at-risk infant may have a genetic predisposition or a brain defect while the family does not know about it. Second, the age of the infant is the first 6 months, and third, there are environmental stressors around (US National Library of Medicine, 2017).

**Differential Diagnosis**

Differential diagnosis includes autopsy although this cannot distinguish between SIDS and accidental suffocation. Other methods include radiographic and ophthalmological examinations to determine accidental trauma or injury, nasal swab (culture or ELISA-based) in order to determine viral causes like pertussis or respiratory syncytial virus, or serum and urine tests or muscle biopsy to determine metabolic causes (BMJ Best Practice, 2017).

**Prevention**

Prevention include making the baby lie on his back and not on his side or stomach, having a firm bed with no soft toys or beddings, not smoking around the baby, and keeping your baby close to you while he is sleeping. Moreover, other prevention measures include not bringing the baby to bed when the parent is tired, breastfeeding because of protective milk, and immunization. Using a pacifier to put a baby to sleep may also help prevent SIDS. Moreover, one should not let his baby feel so hot by adjusting room temperature, should not use products like cardiac monitors or electronic respirators near the baby, and should not give honey to the baby as honey can lead to bacterial poisoning and SIDS (Web MD, 2017).

**Management**

Management is more of prevention, while for parents of families whose infants died of SIDS, what is needed is counseling (BMJ Best Practice, 2017).

**Society and Culture**

In 2015, there were around 1,600 infants who died of SIDS. The cause was unknown for around 30.1 per 100,000 live births, while most deaths at the rate of 23.1 per 100,000 live births were caused by strangulation or accidental suffocation (CDC, 2017). It is not common but it is still an alarming issue to parents of newborn children.

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