Cryptorchidism is the second leading cause of male infertility. The risk of developing testicular cancer is 3 to 4 times higher in a criptorchide patient. Early treatment of cryptorchidism reduces the risk not only of infertility but also of testicular cancer.

Conclusions

These studies and physicians daily experience confirm the absolute need to intervene in the early stages of male development, which is why the pediatrician's role is irreplaceable.

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Neurological functions of the healthy neonate: an overview

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The perinatal period, defined as the time from the 20th week post-conception to the 28th day of corrected age is crucial for the development of neurological functions. Even in the absence of overt brain damage, neonates may be at risk of neurological impairment leading to developmental disorders later in life. A dedicated and comprehensive neurological evaluation is important to timely suspect brain dysfunction and plan interventions during the appropriate developmental window. To this goal, enormous advancements have been made in the last century. In the early days, infant functioning was associated with the model of reflexes, subsequently, implemented by models looking at more generalized motor functioning. These were, however, poor indicators of higher cerebral functions. A most important advance was the introduction of the concept of state [1]. States were differentiated, structured organizations of the brain, behaviour and physiology. Different responses where elicited by the same stimulus in different states, indicating that the infant's brain was not reflexive only. A more behavioural orientation was introduced by Brazelton. His approach was innovative because recognized that neonate is able to regulate its own level of arousal and states, to habituate, to attend and orient, to organize his motor acts and to communicate through its behaviour [2]. The psychologist Als [3] further expanded the behavioural approach proposing the Synactive Theory of Newborn Behavioral Organization and Development. She suggested that development is the maturation of the way the child adopt to handle the experiences from environment in order to maintain his homeostasis (the fundamental neurological function for survival), rather than the attainment of individual abilities. Other important advancements were introduced by Dubowitz [4] who proposed a grading system for muscle tone and posture and by Precthl [5] who characterized the endogenously generated complex and spontaneous neonatal movements (General Movements). Bearing in mind the fundamental steps made by the pioneers of modern neonatal neurological examination can help even the busy clinician to implement the traditional examination with the observation of the general movements and behavioural states. The examination may be further improved by including observation of the autonomic and motor stability at rest or during handling, the behavioural states transition and the interaction with the caregiver, inspired by the Als's theory. The gestalt impression of abnormality will suggest the need for a more formal and specialized evaluation.

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Pain in intellectually disabled children

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Children with intellectual disability experience pain more frequently that healthy children.

In a cross sectional multicentre European study, in 2010, Parkinson et al. estimated a prevalence of pain of 60-73% in children with cerebral palsy[1]. In 2003 on 4 weeks period, Breau et al. recorded that each week 35%-52% of children with intellectual disability have pain. Mean pain duration is longer than 9 hours per week, giving a huge impact on their quality of life. Children with the fewest abilities have more nonaccidental pain[2]. The problem also concern the severity of pain: in a study based on health professionals perception, pain is perceived as mild in 61,1%, as moderate in 25%, as severe in 13,9%[3]. Children with intellectual disability often suffer from chronic conditions and associated diseases that could evoke continuous or recurrent pain, like gastroesophageal reflux, chronic constipation, muscular contractures, hip dislocation, pathologic bone fractures and tooth problems. Moreover, they frequently need invasive diagnostic or therapeutic procedures that can be painful and cause of stress. Pain in these children is often not recognized or underestimated: most of them have communication difficulties and can't self-report their sensations, but they show their suffering in different ways, like atypical facial responses, laughing, hypertonicity or increased spasticity, hands clapping, behavioral changes or aggressiveness (head banging, self-biting or other self-injurious behavior). The parents or caretaker know how to recognize every change in their child's behavior, so they should be consulted regarding their perception of pain. Therefore, currently-used scales for pain assesment in pediatric age are not applicable to cognitively impaired children, but it's advisable to use specific validated scales for cognitive impairment patients that include pain signs typical for these children, for example the FLACC Revised scale [4]. Pain is often under-treated with lower doses of analgesic or anesthetic drugs, because of possible side effects, pharmacokinetics interactions with other drugs in polytherapy or problems due to comorbidity, like gastro-intestinal or respiratory diseases or epilepsy. Moreover, given the wide variety of causes of intellectual disability, pre-existing medical problems, individual sensitivity and comedication in these patients, it's not easy to set up large-scale pharmacological trials. During treatment, measurement of pain is mandatory and essential to determine the effectiveness of therapy. Intellectual disabled children care is complex on many aspects, but every clinician has to recognize, measure and manage pain too, in order to improve the quality of life of these patients and their families.

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