CHAPTER 7

ORCHITIS

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INTRODUCTION

Orchitis, an inflammatory condition affecting the testes, constitutes a significant concern in the realm of pediatric surgery (1, 2). While orchitis can occur in individuals of all ages, its impact on pediatric patients is particularly notable due to the unique anatomical and physiological characteristics of the developing testes (3). In this chapter, we explore the multifaceted aspects of orchitis in pediatric surgery, delving into its etiology, pathophysiology, clinical presentation, diagnosis, management, and prevention.

The importance of addressing orchitis in pediatric surgery cannot be overstated. The pediatric population is especially vulnerable to certain infectious and non-infectious causes of orchitis due to the dynamic changes occurring during testicular development. The immune system's immaturity and evolving hormonal regulation during childhood play pivotal roles in the susceptibility to orchitis and its outcomes.

Untreated or inadequately managed pediatric orchitis can lead to severe complications, necessitating a timely and accurate diagnosis. The condition's potential to cause testicular infarction and impair fertility underscores the need for vigilant management to preserve reproductive health in affected children.

Moreover, in recent years, there have been emerging reports of orchitis linked to certain viral infections, such as COVID-19, further highlighting the relevance

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CONCLUSION

Pediatric orchitis is a significant clinical concern, requiring early recognition, appropriate management, and preventive strategies. This chapter offers a comprehensive overview of orchitis in pediatric surgery, covering its anatomy, etiology, clinical presentation, diagnosis, management, complications, prevention, recent advances, and ongoing research. Viral infections, particularly mumps, play a prominent role in its etiology. Accurate diagnosis, involving medical history, examination, and imaging, is crucial for timely management and preventing complications. Treatment includes medical interventions, supportive care, and surgery when necessary. Preventive measures like vaccination and hygiene promotion are essential in reducing its incidence. Recent research has provided insights into pathophysiology, diagnosis, and treatment. Collaborative efforts can optimize outcomes and overall quality of life for affected children and adolescents. This chapter is a valuable resource for healthcare professionals involved in pediatric orchitis care, aiming for evidence-based practice and improved patient well-being.

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