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RESEARCH ARTICLE

IDIOPATHIC GRANOULOMATOUS ORCHITIS AN INTERESTING CASE REPORT AND REVIEW OF LITERATURE

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ABSTRACT

Idiopathic granulomatous orchitis (IGO) considered as inflammatory process of the testicles. It is about a 17year old male diagnosed with IGO, underwent uneventfully radical orchiectomy. An interesting case report presented, analyzed differential diagnosis dilemma, strategy for therapy – orchiectomy and pathology report too.

Key Words:

Idiopathic Granulomatous Orchitis,
Orchiectomy,
Seminoma.

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INTRODUCTION

Idiopathic granulomatous orchitis (IGO) considered as inflammatory process of the testicles. It is also very rare. Since 1925 about 70 cases have been reported in literature.

Description of the case in chronological order: It is about a 17year old young man underwent left radical orchiectomy for suspected malignancy. The patient presented at the hospital. His left testicle was enlarged and due palpation was hard. The ultrasound high suspicious for malignancy. Neoplastic makers, levels of carcinoembryonic antigen (CEA) and alpha fetoprotein were within normal. Computer tomography for the thorax, abdomen and brain with no significant pathology. PMH of the patient free. To mention 5 years before the procedure trauma on his testis during a football game. Patient underwent successfully left radical orchiectomy. He had a good postoperative recovery and discharge home the second postoperative day.

The pathology reported IGO, excluded also seminoma with granulomatous reaction. On his regular follow up still asymptomatic, no complains and no disease recorded.

DISCUSSION

Idiopathic granulomatous orchitis is a rare inflammatory process of the testis of unknown aetiology. Still at the present the aetiology is obscure (Gadgil, 2001). Was also first described in 1925 by Grunberg (Gadgil, 2001). It is characterized by presence of non-specific granulomatous inflammation and admixed multinucleated giant cells. It usually presents as a testicular mass which is highly suspicious of malignancy. The ultrasound is very helpful but requires further investigations for the testis. Neoplastic makers, specially levels of carcinoembryonic antigen (CEA) and alpha fetoprotein, considered necessary to be done. Computer tomography for the thorax, abdomen and brain with may demonstrate significant pathology or not and may help to differential diagnosis. A biopsy for the testis is contraindicated in a suspected case of malignancy (Gadgil, 2001). The final diagnosis is based only on histopathology report (Gadgil, 2001).

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Histologically, there is extensive destruction of seminiferous tubules with tubular or interstitial pattern of granulomatous inflammation and prominent collagen fibrosis (Karram, 2013; Somak Roy, 2011; Martinez-Rodriguez, 2006). Trauma and possible auto-antibodies against sperm have been postulated to be the underlying mechanism (Gavrel, 2016; Karram, 2014; Somak Roy, 2011). Its relationship to Ig G4-related disease (IgG4-RD) has not been evaluated (Karram, 2014). Differential diagnoses include intratubular germ cell neoplasia, malignant lymphomas, and malakoplakia (Gadgil, 2001; Gavrel, 2018; Karram, 2014; Somak, 2011). Clinically seminoma and granulomatous orchitis are difficult to separate. Also histologically is difficult to separate Idiopathic granulomatous orchitis to seminoma. (Gadgil, 2001; Gavrel, 2018; Karram, 2014; Somak, 2011; Martinez-Rodriguez, 2006) Conservative therapy of antibiotics, steroids and anti-inflammatory agents is not effective.⁴Radical Orchiectomy is currently the most appropriate therapy for this condition (Gadgil, 2001; Gavrel, 2018; Karram, 2014; Somak, 2011; Martinez-Rodriguez, 2006; Peyri-Rey, 2008).

Conclusion

Idiopathic granulomatous orchitis is a very rare entity. Is not considered as a malignancy. Differential diagnosis from intratubular germ cell neoplasia, seminoma, malignant lymphomas, and malakoplakia has to be done.

Orchiectomy seems the treatment of choice at the moment. Pathology report confirm the diagnosis. Regular follow up is necessary to check the other testicle too (Peyri-Rey, 2008).

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