Letter to Editor

# Pseudotumor of urinary bladder by infected hernia mesh: Where is the evidence of infection?

Dear Editor,

We have read the case study of urinary bladder pseudotumor following mesh repair of right inguinal hernia by Dubbeling and Ramesh, with great interest.[1] Currently, tensionless repair of inguinal hernia with mesh reinforcement either by open or laparoscopic technique is the most widely practiced method. With ever increasing use of polypropylene mesh in hernia management the incidence of mesh related complications are also on the rise. These complications have protean manifestation and in this instance the authors had encountered and successfully managed a truly unusual one.

The index patient was referred to the authors with a provisional diagnosis of infected urachal cyst and was thoroughly investigated including cystoscopy and computed tomogram (CT) abdomen. The patient had resisted operative intervention for nine long months before he was subjected to emergency exploratory laparotomy. Unfortunately, the surgical procedure had to be curtailed in view of suspicion of a possible malignant process and lack of availability of frozen section facility. We appreciate the honesty of the authors in this respect but the exact reason for subjecting the patient to emergency late night intervention should have been clarified. Probably, delaying the intervention by a few hours could have saved the patient form an unnecessary second operation. The latter intervention had revealed the presence of a pseudotumor involving the urinary bladder and posterior rectus sheath. It also identified the polypropylene mesh as the culprit. The authors' experience thus enriched us about the perils of overdependence on imaging techniques as the CT abdomen even though carried out twice had failed to identify the mesh in the tumor mass.

The authors have attributed the development of this complication to infection of the implanted mesh. Infection, erosion, irritation, adhesion, migration, seroma formation, chronic pain and mechanical failure are the common complications associated with polypropylene mesh. Of all the known complications, mesh infection is a hernia surgeon's worst nightmare. In this context, we intend to clarify the two terminologies, i.e. infection and inflammation that are often used interchangeably and are thought of as synonyms. Infection is the association of the micro-organism with the human host that may or may not culminate in a disease process.[2] In contrast, inflammation is the protective host response to various insults such as trauma, ischemia, foreign body and infection. Hence, the presence of infection is not mandatory for mounting an inflammatory response. The authors' claim of infected mesh as the underlying cause is not supported either by finding of purulent material during the surgical intervention or by isolation of microorganisms on microbiological examination of the pseudotumor tissue. Exacerbated host response to chronic inflammation induced by the mesh may solely be responsible for the whole process.

We would like to conclude that identification of microorganisms is the key to labeling of a pathological process as an infective one. Differentiation of inflammation from infection will definitely contribute to rational use of antibiotics in patient management.

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Website: www.indianjurol.com

DOI: 10.4103/0970-1591.126921