Gastrointestinal stromal tumour in the urinary bladder

Tumor del estroma gastrointestinal en la vejiga urinaria

Dear Editor,

GISTS (gastrointestinal stromal tumours) are mesenchymal tumours that are most frequent in the gastrointestinal tract and represent 5% of all sarcomas. They have an estimated annual incidence in 14.5 million, a prevalence of 129 per million and 6,000 new cases per year are published in North America. Formerly, these tumours were classified as leiomyosarcomas, leiomyoblastomas or schwannomas. They present immunophenotypic characteristics of smooth muscles and positivity of the cells of the myoenteric nervous system; furthermore, they have c-kit and express KIT. The fact that Cajal’s interstitial cells are positive for KIT and CD34 hints at the possibility that these cells cause these tumours. They most frequently first appear in the stomach (50-60%) and in the small intestine (25%), however they may appear in any part of the gastrointestinal tract. They are rare outside the gastrointestinal tract and it is thought that their location in the mesentery, omentum or retroperitoneum is most likely due to metastasis or tumour

Figure 1  A) 13 x 10 mm nodular lesion on bladder wall. B) H-Ex20 histological image of neoplastic proliferation.
extension, and they are denominated E-GISTs (Extra-gastrointestinal stromal tumours).

E-GIST of the urinary bladder is a very rare tumour and the majority of the cases published show invasion of the serous membrane and/or of the entire bladder wall.1,2 It has been demonstrated that 95% of GIST are CD117-positive (KIT). Other markers include DOG1 (87%), theta-type protein kinase C (80%), CD34 (60%-70%) and smooth muscle actin (30%-40%). This immunohistochemical profile allows differentiating a leiomyosarcoma and schwannoma.1-3

We recently diagnosed and treated a patient with e-GIST of the urinary bladder and low mitotic index in the transurethral resection (TUR) of the bladder (fig. 1). The study with PET-CT demonstrated local recurrence in the posterior wall of the bladder, for which reason we once again performed another TUR that performed the persistence of the lesion. We administered adjuvant treatment with Imatinib and the patient was disease-free one year later. We believe that it is the first case that, as such, exclusively involves the bladder wall without presenting pelvic mass attached to the bladder. Therefore, it could be a genuine e-GIST of the urinary bladder. Due to the histological and clinical peculiarity of this pathology, we wanted to share our experience with the diagnosis and management of this entity with the readers of Actas Urológicas Españolas.

References


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