Huge pelvi-abdominal malignant inflammatory myofibroblastic tumor

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A research team from Taiwan reported an unusual case of pelvic-abdominal inflammatory myofibroblastic tumor (IMT) with malignant transformation in a 14-year-old boy presenting with abdominal pain and 9 kg body weight loss in one month. This is the largest documented case of IMT in a pediatric patient and the first report of IMT with malignant transformation originating from the pelvic extraperitoneal space.

Inflammatory myofibroblastic tumor (IMT) is an uncommon benign neoplasm with locally aggressive behavior but malignant change is rare. Such a rare tumor occurring in a 14-year-old patient with clinical presentations of abdominal pain and body weight loss was seldom described before.

A research article to be published on June 7, 2010 in the World Journal of Gastroenterology addresses this question. A research team led by Professor Ko from Chang Gung University College of Medicine, Chang Gung Memorial Hospital-Kaohsiung Medical Center, Taiwan, reported that computed tomography was useful for clear delineation of this huge pelvic-abdominal mass with extraperitoneal origin and prominent peritumoral vascularity which was crucial for surgical planning. Subsequent surgery, histopathology, immunohistochemistry, DNA sequencing and electron microscopy confirmed the final diagnosis of inflammatory myofibroblastic tumor with malignant transformation. Despite radical tumor resection, rapid tumor recurrence occurred in the lower abdomen 20 d after discharge.

This report documents the first known case of pelvic extraperitoneal IMT with malignant transformation in a pediatric patient. In light of this case, IMT should be considered in the differential diagnosis of pelvi-abdominal mass with large central necrosis and the presence of prominent peritumoral vascularity may also be a clue of high metabolic demand and even malignant transformation.

More information: Lu CH, Huang HY, Chen HK, Chuang JH, Ng SH, Ko SF. Huge pelvi-abdominal malignant inflammatory myofibroblastic tumor with rapid recurrence in a 14-year-old boy. World J Gastroenterol 2010; 16(21): 2698-2701
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