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Case Report

Giant chondrosarcoma at left ischiopubic arch in an elderly man: a case report

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Abstract: We here in present a very rare case of giant chondrosarcoma with long history, presenting as a huge mass at left ischiopubic arch in an elderly man, in order to illustrate the clinical manifestations, operation method and image manifestations.

Keywords: Giant chondrosarcoma, left ischiopubic arch

Introduction

Chondrosarcoma is one of the common primary malignant tumors. More than 90% of the chondrosarcoma are idiopathic, which grow slowly, with less transfer and a relatively good prognosis. The primary chondrosarcoma usually happens to adults and elderly man aged between 40 and 70 years. Most of chondrosarcoma is found at pelvis (iliac bone involved most frequently), followed by proximal femur, proximal humerus, distal femur and ribs. The mass was the main manifestation. The course was slow and the pain was not obvious. Chondrosarcoma occurs in the marrow mesenchymal tissue or synovial membrane. They are subclassified into mesenchymal, dedifferentiated, myxoid, clear cell, and synovium subtypes.

As chondrosarcoma are insensitive to radiotherapy and chemotherapy, extensive surgical resection is the most effective treatment. Consequently, we report a very rare case of giant chondrosarcoma.

Report

A 65-year-old male, suffering painless mass of left groin for the past 18 years. Eighteen years ago, the patient found a mass in his left groin, which measured 20×30 mm in size with the characteristics of being immobile, hard, without spontaneous pains and tenderness. In 1995, He visited Hubei Provincial Hospital of Tcm, and took Chinese medicine for 2 years, but the mass did not subside. In 2004, He visited Zhongnan Hospital of Wuhan University and a computed tomography (CT) scan of the mass showed that the bone density of left os ischii increased, and that mottling bone-formation was seen in the soft tissue (**Figure 1**), yet the patient refused any treatment. On April 12, 2012, the patient visited Zhongnan Hospital of Wuhan University again, and complained the pain of the mass, especially in the sitting position. Besides, the mass affected his daily walking. A CT scan and 3D imaging showed a huge mass (133×145×139 mm^3) at the left inguinal region, considered to be chondrosarcoma (**Figure 2**). On April 24, 2012, the ischiopubic tumor resection was conducted in our hospital.

The operating procedure: After the success of CSEA anesthesia, the patients took lithotomy position. Do the routine disinfection of the left inguinal region with 1% povidone iodine solution. A shuttle shaped incision was made along the center of the mass and exposed the chondrosarcoma. The tumor had complete capsule, which was not adhesive with the surrounding soft tissue. Do the complete resection of tumor, including capsule (**Figure 3**). Then wash the wound by gentamicin and 0.9% sodium chloride solution, and place a drainage tube. The post-

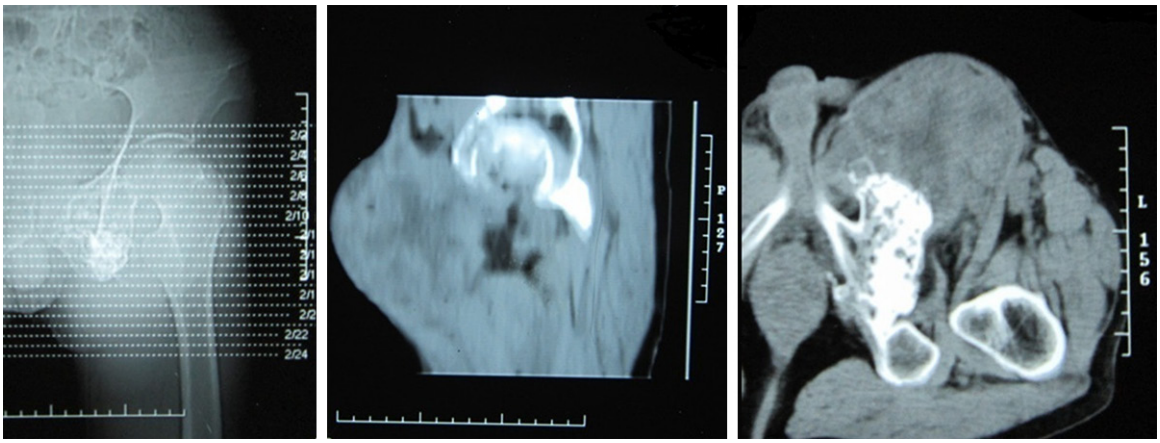

Figure 1. In 2004, CT showed that the left sciatic bone density increased, and mottling bone-formation was seen in the soft tissue.

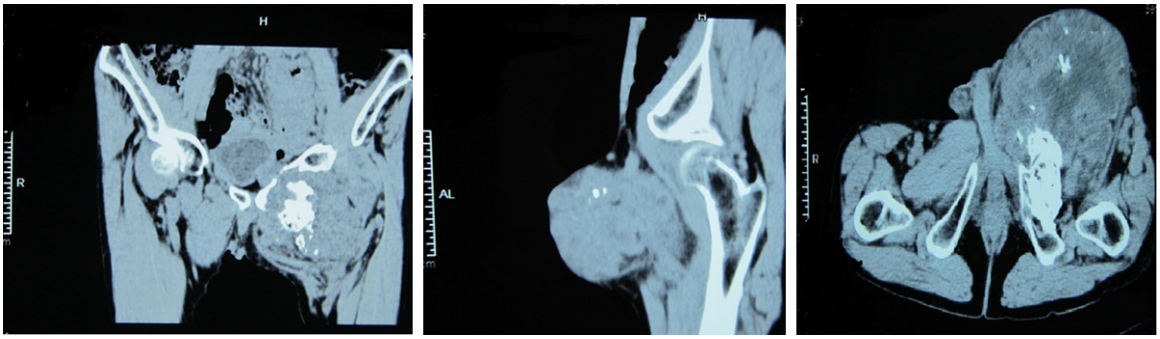

Figure 2. In 2012, CT showed a huge mass (133×145×139 mm^3) of the left inguinal region, considered to be chondrosarcoma (sciatic exostosis canceration?).

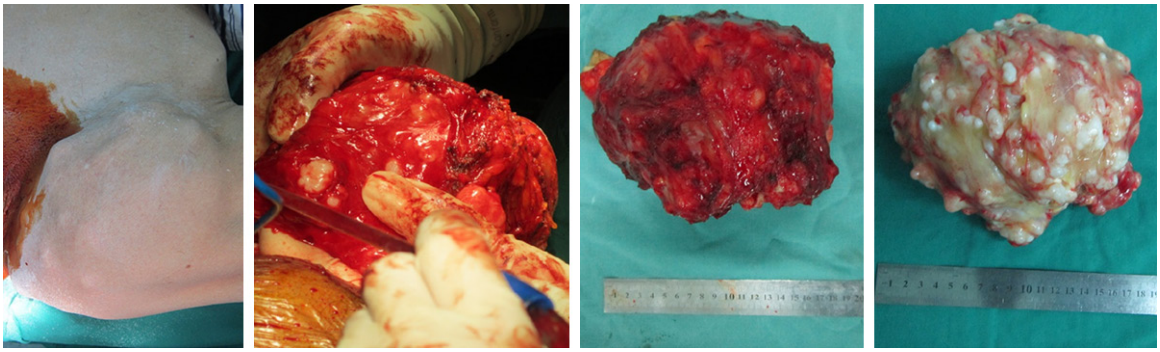

Figure 3. On April 24, 2012, the gross view of mass in the operation.

operative pathological diagnosis was chondrosarcoma (grade I-II) (**Figure 4**). Three months after surgery, the patient complained slightly numbness at left groin wound. However, the numbness of the left crus disappeared, and the activity of left hip was good. Two years after surgery, the man did not complain about any discomfort.

Discussion

Chondrosarcoma is one of the common primary malignant tumors. More than 90% of the chondrosarcoma are idiopathic, which grow slowly, with less transfer and a relatively good prognosis [1]. Idiopathic chondrosarcoma often happens at pelvis, and the incidence is 40%-

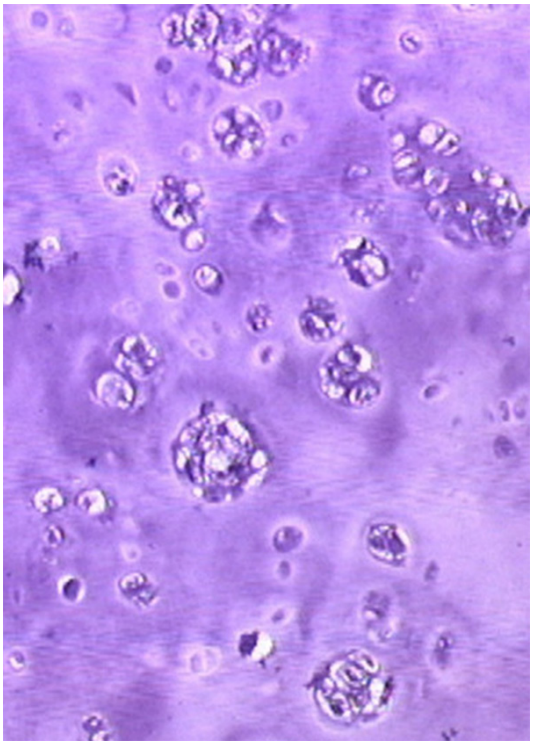

Figure 4. Postoperative routine HE staining of the mass showed: a large number of neoplastic chondrocytes lobulated arrangement, the differentiation of the tumor cell is relatively good. The mass is in lacunae with calcification, and the interstitial is transparent matrix.

50%. Present D [2] reported 8 cases of chondrosarcoma at Istituto Rizzoli in 1991, but there was no report of so huge size ischiopubic chondrosarcoma with long history. As chondrosarcoma are not sensitive to radiotherapy and chemotherapy, extensive surgical resection is the most effective treatment.

When the patient visited our hospital, his mass was so huge that some nerve was oppressed. The chondrosarcoma had no invasion to the left hip joint, and that the movement of the hip joint was not too bad. Considering that the patient was 65 years old, we resected the mass completely in order to avoid the further damage of blood vessels and nerves in the left groin area. Moreover, the patient will have relatively better quality of life. In addition, postoperative pathological examination showed I-II grade chondrosarcoma (the relatively high degree of differentiation chondrosarcoma), presenting low and moderate malignancy. Thus, the survival period of the patient may have no relationship with the chondrosarcoma.

Disclosure of conflict of interest

None.

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