



Case Report

Post-traumatic Perineal Pubic Rami Protrusion: A Simple Surgical Management

創傷後會陰恥骨突出：簡單的手術治療



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A B S T R A C T

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Although pubic ramus fractures are common, they usually heal without surgical intervention and result in little long-term disability. We herein present two cases of symptomatic malunion of pubic rami fracture, which was successfully treated with a simple and safe surgical technique. The patients' local symptoms resolved afterwards.

中文摘要

恥骨支骨折是很常見的，通常無需手術干預便可癒合，幾乎沒有什麼長期性障礙。我們描述兩個有症狀的畸形癒合恥骨支骨折病例，利用一種簡單及安全的手術，成功治療患者的局部症狀

Introduction

Although pelvic fractures are associated with a diverse range of complications, little has been written about the treatment of residual symptomatic prominence of malunited pubic rami fractures. We herein present two cases of late presentation of symptomatic prominence of the malunited pubic ramus, which was successfully treated with a simple and safe operation.

Case reports

Case 1

A 46-year-old woman sustained a Type 2 (Young and Burgess classification) lateral compression pelvic fracture in a road traffic accident. The pelvic ring was fixed by percutaneous insertion of sacroiliac screws, and the ring disruptions were stabilized by applying an anterior pelvic external fixator for 3 months. The patient's initial recovery was uneventful. Two years after the injury, the patient presented with left-sided perineal pain on sitting and walking and dyspareunia. A clinical examination was performed, which demonstrated a tender prominence of the inferior pubic ramus in the perineum. Radiographs of the pelvis demonstrated a left hemipelvis malunion, with a prominent nonunion of the inferior pubic ramus (Figure 1). Because of her symptomatic dyspareunia, a gynaecological opinion was obtained to exclude any intravaginal bone prominence. There was no pre-existing psychiatric disturbance.

The patient was counselled for surgical trimming of the inferior pubic ramus. Surgery was performed in the lithotomy position through a paralabial incision directly over the bony prominence. A sharp dissection was carried down to the bone and then continued subperiosteally. The inferior pubic ramus was excised 2–3 cm with bone nibblers and osteotomes until no prominence remained. Closure was performed with absorbable sutures. There were no postoperative complications.

Three months postoperatively, the patient did not have dyspareunia and pain on walking and sitting.

Case 2

A 47-year-old lady presented with right-sided perineal pain on walking, sitting, and in particular while riding her bicycle. At the age of 38 years she had sustained an unusual anterior–posterior compression pelvic fracture, extending into the right acetabulum. This occurred when she fell from a horse, with the horse falling on top of her. She underwent delayed reconstruction of her iliac wing after an initial nonoperative management of her injury because of pain.

Clinically, she had a tender prominence of the inferior pubic ramus in the right perineum. Radiographic images demonstrated a malunited fragment of inferior pubic ramus, together with asymptomatic degenerative change of her right hip (Figure 2). There was no underlying psychiatric or gynaecological cause for her symptoms.

Surgical excision of the prominence was performed in the lithotomy position using a paralabial incision, subperiosteal dissection, and removal of the prominence with osteotomes and bone

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Figure 1. Case 1 with nonunion of left inferior pubic ramus fracture.



Figure 2. Case 2 with malunion of right inferior pubic ramus fracture.

nibblers. The patient made an uneventful recovery without post-operative complications.

At 6-month follow up, the patient's wound healed well, and her perineal symptoms had resolved. She could enjoy painless walking, sitting, and cycling.

Discussion

A majority of pubic ramus fractures will heal without complications, whether isolated or in combination with more extensive pelvic and acetabular fractures.

Koval et al¹ reported that 95% of nonsurgically treated isolated pubic ramus fracture patients returned to their preinjury activities of daily living at 1-year follow up. Although disabling or unpleasant sequelae are unusual, they occur in some cases and it may be potentially treatable.

Only limited studies are available regarding the management of this rare late complication of pubic rami fractures. The nonunion of the fractured bones can be treated with traditional surgical techniques. There were also case reports on superior pubic rami nonunion treated with percutaneous screw fixation, internal plating, and external fixation for nonunion.^{2–5} However, only one publication describing the management of local perineal symptoms due to prominence of the pubic rami secondary to insufficiency fractures in a patient could be found.⁶ These two cases demonstrated that local excision of the bony prominence is a safe and simple surgical procedure, which alleviates the patient's local symptoms.

Conflicts of interest

The authors declare that they have no financial or non-financial conflicts of interest related to the subject matter or materials discussed in the manuscript.

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