CASE REPORT

Superior Gluteal Artery Pseudoaneurysm after Bone Graft Harvest from the Posterior Ilium

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ABSTRACT

Injury to the superior gluteal artery is not an uncommon complication in patients with pelvic trauma. Iatrogenic injury to this artery has also been described, such as during iliac crest bone grafting, iliosacral screw placement, and total hip replacement. However, only a few cases of pseudoaneurysm formation associated with posterior ilium bone graft harvesting have been reported. This report describes a patient with superior gluteal artery pseudoaneurysm that was noticed a few days after a bone graft had been harvested from the posterior ilium for spinal fusion. To the authors’ knowledge, this is the first case report from this locality. Surgical precautions and different treatment modalities for this potentially fatal complication are discussed.

Key Words: Aneurysm, false, Buttocks/blood supply, Ilium/transplantation, Spinal fusion

INTRODUCTION

The posterior iliac crest is a common site from which bone grafts are harvested for posterior spinal fusion. Many complications from harvesting have been reported, such as infection, haematoma formation, cluneal nerve injury, stress fracture of the ilium, arteriovenous fistula formation, ureteral injury, or even injury to the superior gluteal artery. Schorn et al identified 123 patients with true aneurysm of the superior gluteal artery in a literature review in 1995. However, only a few patients with pseudoaneurysm associated with the harvest of a posterior ilium bone graft have been reported.

In this article, pseudoaneurysm of the superior gluteal artery in a patient who underwent posterolateral spinal fusion is reported. This patient presented with a swelling in the left leg and a reduced haemoglobin level 6 days after the spinal surgery. Injuries to the arteries usually result in immediate profuse bleeding during surgery; delayed presentation in the form of a bleeding pseudoaneurysm leads to difficulties in making the correct diagnosis.

CASE REPORT

A 79-year-old man presented to the Department of Orthopaedics and Traumatology, North District © 2004 Hong Kong Orthopaedic Association & Hong Kong College of Orthopaedic Surgeons.