

Bony Foreign Body from the Opposite Motorcycle Injury Party (A Case Report)

สิ่งแปรผลกลอมที่เป็นกระดูกของคู่กรณี ในอุบัติเหตุรถจักรยานยนต์ (รายงานผู้ป่วย 1 ราย)

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ABSTRACT

Retained foreign body in victim body can be occurred while motor vehicle accident. Foreign body can be glass, wood, sand, etc. but no any report about bony foreign body. 21-year-old man suffered compound knee joint injury from motorcycle accident. The wound was caused by tibial crest bony fragment from opposite injury party. The initial diagnosis was missed to be compound tibial plateau fracture. The treatment was debridement and foreign body removal. Blood tests for transmitted disease e.g. viral hepatitis, HIV were done and results were negative in both victims.

Keywords: Bony foreign body, motorcycle accident, bone transfer from other victim

บทคัดย่อ

สิ่งแปรผลกลอมที่ตกค้างในร่างกายหลัง จาก "ได้รับอุบัติเหตุจราจร สามารถพบได้ เช่น เศษแก้ว ไม้ ดิน ทราย แต่ยังไม่เคยมีรายงานว่าพบมีเศษกระดูกในแผลจากเหยื่อรายอื่น ผู้ป่วยชายอายุ 21 ปี ได้รับอุบัติเหตุ รถจักรยานยนต์ชน มีแผลที่หัวเข่า มีเศษกระดูกจากกระดูกหน้าแข็งของผู้ป่วยคู่กรณี ตกค้างในแผล ผู้ป่วยได้รับการผ่าตัด นำเศษกระดูกออก ตกแต่งบาดแผล และได้รับการตรวจเลือด เพื่อหารอยโรคที่สามารถติดต่อได้ จากเลือด หรือกระดูก ซึ่งได้ผลลบ

คำสำคัญ : สิ่งแปรผลกลอมที่เป็นกระดูก อุบัติเหตุรถจักรยานยนต์ กระดูกส่งถ่ายระหว่างบุคคล

Introduction

There were some reports about retaining foreign body after motor vehicle accident. Foreign body could be anything such as metal, glass, sand, stone or even wood.¹⁻⁸ But no one has reported about bony fragment, especially bone from the opposite motorcycle injury party. This will report one case with retaining bony foreign body from the other victim that causing confusion to surgeon for management plan.

A case report:

21-year-old man was referred to Nakhonpathom Hospital with history of motorcycle accident. The initial diagnosis was compound tibial plateau fracture. The wound was about 7 cm long at anterior aspect of right knee. The patient's x-ray films were brought to conference in order to ask for some surgical technique advises. The surgical plan was debridement and ORIF with T-Plate. Suggestions from conference were,

the density of the bony fragment was more than proximal tibia, shape of bony fragment was not as usual tibial plateau fragment and the fracture line at tibial plateau was not clear (fig. 1 a, b). The diagnosis should not be simple as compound tibial plateau fracture. Bony fragment should not be the butterfly fragment of tibial plateau, it should be from elsewhere. All details about accident should be completed.



Fig. 1 (a, b) X-rays of right knee of first patient showed bony fragment mimic tibial plateau fracture.

The event of accident was two motorcycles crashed each other. There were two victims in the accident, each victim rode on each motorcycle. Right leg of both victims hit each other. Both of them were referred to Nakhonpathom Hospital. The other case was 49-year-old man. The diagnoses were ipsilateral compound comminuted fracture both bones right leg with bone loss and close fracture right femur. The second patient was brought to operating room for debridement and external fixation for tibia (fig. 2 a, b) and plate fixation for femur

while the first one the wound right, knee joint was debrided and removal of foreign body. (fig. 3) The x-rays of right knee of the first patient after remove foreign body showed no fracture at tibial plateau. (fig. 4 a, b) The foreign body was bony fragment form tibial crest, which was matched to the tibial fracture of the second patient. (fig. 5) Blood tests for viral hepatitis, HIV and other transmitted diseases were examined after operation in both patients. Fortunately all blood test reports were negative.

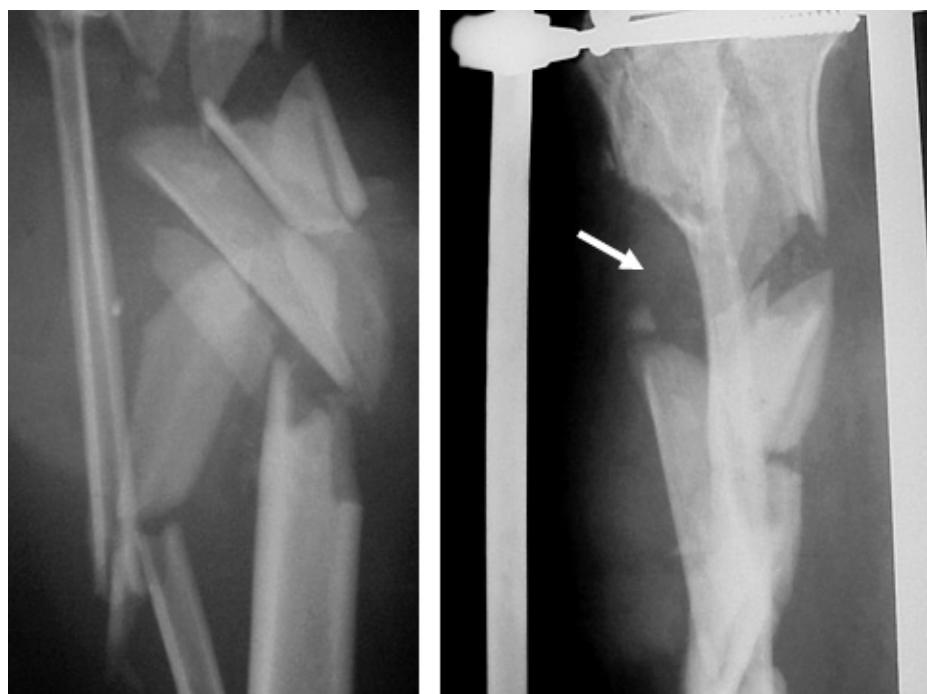


Fig. 2 (a,b) X-rays of right leg of the second patient showed severe comminuted fracture of tibia and fibula. After external fixation, there was some bony defect at tibial crest. (arrow)



Fig. 3 Intraoperative picture showed bony foreign body in wound of right knee.

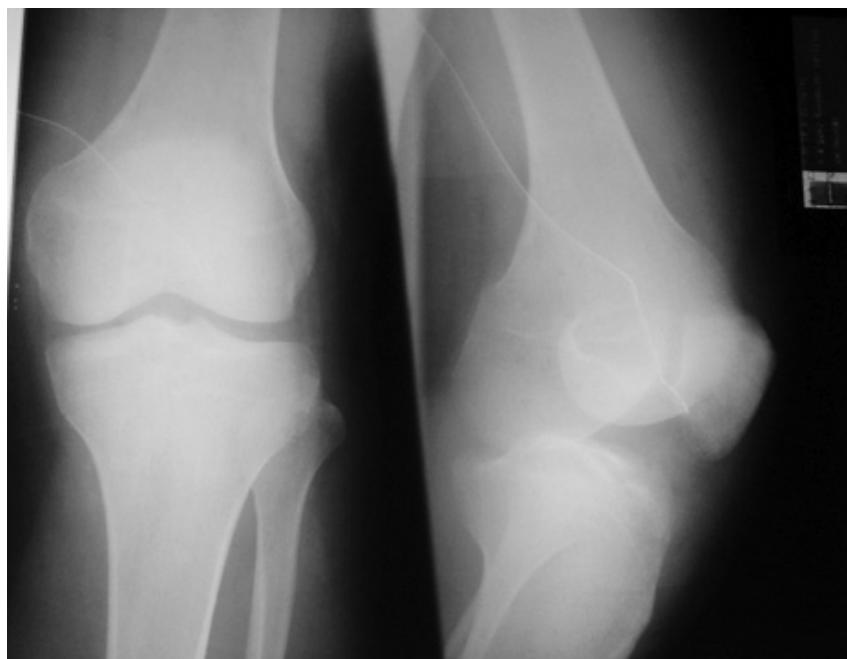


Fig. 4 (a, b) Post-operative x-ray showed no tibial plateau fracture of right knee.



Fig. 5 Bony fragment from wound of right knee showed the appearance of tibial crest.

Discussion

Decelerated injury caused by body impact with other object, part of the object can penetrate and retain in body to become a foreign body. The foreign body can be glass, metal, stone or wood.¹⁻⁸ The importance of foreign body in body is tissue injury, contaminated and infection. There has been no any report about the transferred bone from one people to another as foreign body. This event rarely occurred especially in warm and cold climate zone, because people wear thick clothes and shoes while riding. In tropical region people wear thinner clothes and frequently shorts and only slippers, which bone transfer can occur while part of body impact each other in motorcycle accident. The diagnosis can be confusing and wrong to be

compound fracture. Leading to mal-management plans in both before and at operating time. The importance of this foreign body is not only bacterial infection nor tissue injury but also the more serious transmitted disease, such as hepatitis virus B or C, acquire immune deficiency syndrome etc, can be innoculated from one to another if the donor has infected.

Conclusion

21-year-old man suffered the motorcycle accident. The provisional diagnosis was compound tibial fracture. The surgical plan was debridement and ORIF with T-Plate. But the real condition was part of tibial bone from other injury party was introduced to right knee causing compound knee injury with retained foreign body.

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