

Surgical Management and Angioembolization in a Hybrid Operating Room for a Patient with Multiple Injuries

Pil Young Jung

Department of Surgery, Yonsei university Wonju college of medicine, Wonju Severance Christian Hospital, Trauma center, Wonju, Korea

The current management of pelvic fracture patients who are hemodynamically unstable consists of aggressive resuscitation, preperitoneal pelvic packing, external fixation, and angioembolization. Despite this multidisciplinary approach, a high mortality rate of pelvic bone fracture was observed in these high-risk patients. Therefore, we pursued a proper therapy to improve patient outcomes. Here we report on a successful treatment for patients who have injured their pelvis with a lethal injury.

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Key Words: Pelvic bone fracture; Angioembolization

CASE

A 56-year-old male patient who had no prior medical history was admitted with blunt trauma via the emergency room. Upon admission, he had evidence of shock with fluid collection on the abdominal ultrasound and unstable pelvic fracture. Also, he had multiple fractures of the transverse process of the lumbar spine, a skull base fracture, a temporal bone fracture, and multiple rib fractures. We planned an emergency operation in a hybrid operating room for angioembolization. The preperitoneal pelvic packing was completed first followed by angioembolization of the internal iliac artery and the internal maxillary artery branch. Finally, an external fixation of the pelvis was performed. After 2 days, tape and bandages were removed from the area. The patient recovered and received rehabilitation treatment without any further complications.

DISCUSSION

A pelvic bone fracture with the patient in a hemodynamically unstable status must be managed with surgery and angioembolization using a hybrid operating room. A hybrid operation room offers tremendous potential to expedite hemorrhage control in trauma patients (1). Hybrid trauma operating and resuscitation rooms are the obvious solution to providing the best multi-modality trauma care for those exsanguinating (2).

Conflict of Interest Statement

No potential conflict of interest relevant to this article was reported.

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Correspondence to: Pil Young Jung, Department of Surgery, Yonsei University Wonju College of Medicine, Wonju Severance Christian Hospital, 20 Ilsan-ro, Wonju-si, Gangwon-do, Republic of Korea
Tel: 82-33-741-0882, Fax: 82-33-741-1205, E-mail: surgery4trauma@yonsei.ac.kr

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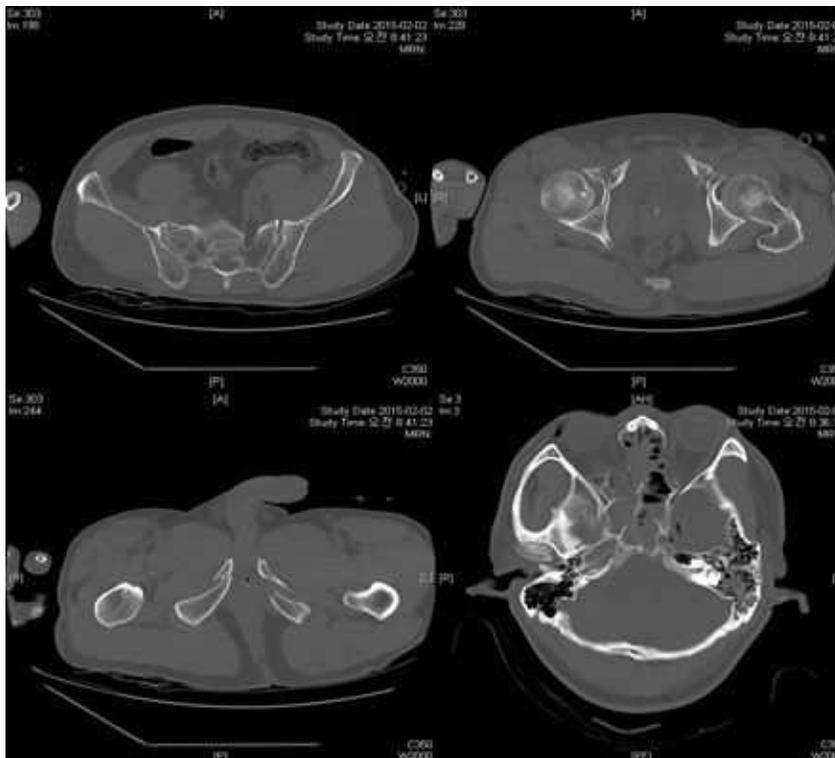


Fig. 1. CT scan shows pelvic bone fracture and skull base fracture

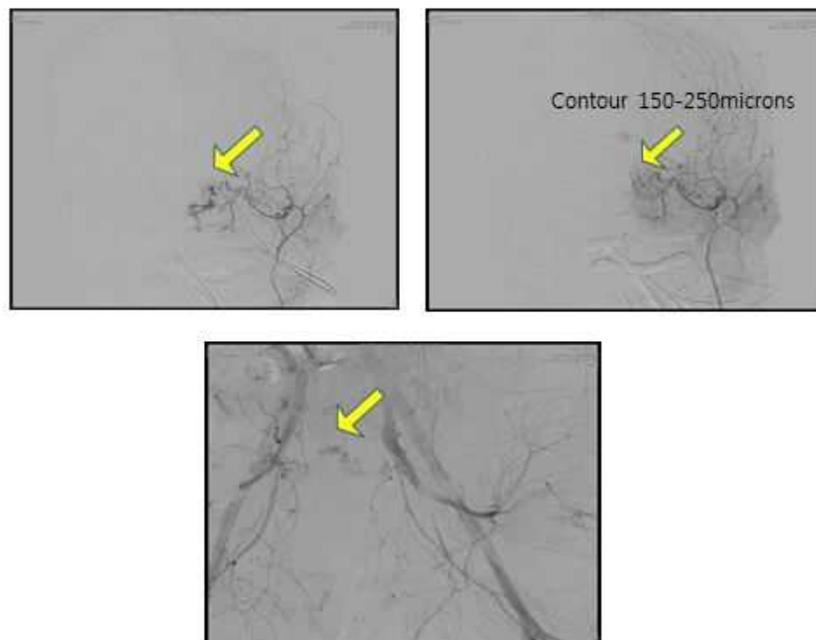


Fig. 2. The picture shows angioembolization for left internal maxillary artery and internal iliac artery.

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