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CASE REPORT

Conservative Treatment Of Huge Retroperitoneal Puerperal Hematoma: Case Report

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ABSTRACT

Introduction: Retroperitoneal hematomas(RPH) is a consequence of injury to bony structures, ruptured of intestinal or retroperitoneal viscera and major blood vessels. RPH is an important factor for hospitalization in patients with trauma and proper treatment is still under discussion and Controversial. We describe a successful case of conservative treatment of huge hematoma after cesarean section.
Case presentation: An Iranian 34-year-old multigravida woman with three previous cesarean sections from Urmia province presented to our hospital with amniotic fluid leak. She had full-term pregnancy. Caesarean section was done. One day after caesarean section, she became dyspnea and had chest pain in left side. Embolism is suspected and enoxaparin was administered. According, hemoglobin decreased (hemoglobin:6.2) after administered the second dose of enoxaparin and a clear dullness percussion led to suspected to hemorrhage and RPH was discontinued enoxaparin. After the patient is stable, the patient was discharged and RPH was followed up by ultrasonography and conservative treatment.
Conclusion: Conservative treatment of retroperitoneal puerperal hematoma with good clinical evolution, depends on status of the patient, cause of injury and its evolution.

INTRODUCTION

Hematomas can be developing in many parts of the body due of trauma, bleeding disorders and surgical operation. The diagnosis of this condition is based on symptoms, physical examination (1). Retroperitoneal space contains many vascular and muscular structures, gastrointestinal, genitourinary and nervous (2). RPH is a consequence of injury to bony structures, ruptured of intestinal or retroperitoneal viscera and major blood vessels (3, 4).

Generally, hematomas are often naturally reabsorbed (1). Hematomas are rarely cause long-term or serious problems (1).

RPH rarely are an obstetrical problem (5), which may be caused by arteriovenous malformations, trauma, spontaneous rupture of arterial aneurysms, iatrogenic and bleeding lacerations related to episiotomy or operative deliveries (6-9). There is evidence in literature related to a rare presentation of RPH after normal vaginal delivery(6).

Retroperitoneal puerperal hematoma management is unclear in patients with non-penetrating and penetrating etiologies (5). Since the underlying damage and treatment are significantly different, operative or non-operative approach are based hematomas injury mechanism and hemodynamic status of patients (10). RPH is an important factor for hospitalization in patients with trauma and proper treatment is still under discussion and controversial (11). However, we describe a case report of successful conservative treatment for huge hematoma after cesarean section.

CASE PRESENTATION

An Iranian 34-year-old multigravida (G4L3) woman with three previous cesarean sections from Urmia province presented to our hospital with amniotic fluid leak. She had full-term pregnancy. Caesarean section was done. Investigations revealed in admission hemoglobin 12.8 gm/dl, platelet was116000. One day after caesarean section, she became dyspnea and had chest pain in left side. The physical examination reveals respiratory rate 22 breaths/min, pulse rate 92, blood pressure of 100/70 mm Hg in right hand in supine position and oxygen saturation 98%. Embolism is suspected

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and heparin prophylactic was administered. Heparin prophylactic has been changed to enoxaparin (60mg, Bis in die , Daily) and Computed Tomography angiogram was done. According, hemoglobin decreased (HB:6.2, platelet:130000) after administered the second dose of enoxaparin and a clear dullness percussion led to suspected to hemorrhage and RPH was discontinued enoxaparin. Two units of packed red blood cells and one unit of Fresh frozen plasma were injected. Computed Tomography(CT) results showed that there is a RPH (size: 97*81*79 mm, volume: 332cc). Investigations after transfusion showed that HB 11.2 gm/dl, white blood cell count of 15,000/ mm3, platelet was116000. After the patient is stable, the patient was discharged and RPH was followed up by CT scan and conservative treatment. Conservative treatment with observation and supportive care, should be observed and monitor for signs.

The results of follow up by ultrasonography in after seven months showed that the size of the hematoma was diminished (size: 43*41*24 mm, volume: 23cc).

DISCUSSION

Damage to adjacent organs, blood transfusion, infected hematoma, cause of injury and the need for surgery are among the most important factors associated with increased mortality in RPH (11).

RPH depends on the location of the hematoma and its behavior (2). Diagnosis and treatment of RPH is complex and difficult. Therefore, decisions about conservative or surgical treatment are important (11).

The results of a study have shown that a rare presentation of RPH after caesarean section secondary to an arteriovenous malformation, which was to treated conservatively (9). The results of the study Evidence from literature suggests that the patient was surgically due to unstable hemodynamics despite intensive postoperative care that led to a lethal outcome (12). The results of the study The results of a study have shown that main method of diagnosis of RPH is CT scan. CT scan determines the location and size of the hematoma. Laparoscopy can also play a role in hematoma management and prevent unnecessary laparotomy. Early diagnosis and careful conservative management can improve the outcome of RPH (13).

RPH management strategies have recommended mandatory exploration of laparotomy in injuries of the great vessels of the abdomen, pancreas and duodenum and selective surgical exploration in ascending or descending colon, duodenum, kidney, genito-urinary vascular structures, ureters and muscular vessels and pelvis (2). Patients with suspected resistant hemodynamic instability or Intraperitoneal bleeding symptoms have been suggested immediate laparotomy (4, 14, 15). Surgical approach may not be necessary as symptoms are not flaring up or there is a progression (16).

Surgery may be difficult because it requires opening the retroperitoneal space identifying and ligating of bleeding vessel whereas in conservative management with vital sign monitoring in hemodynamically stable patient, the hematoma tamponades bleeding vessel.

It is recommended that studies be conducted to determine the relationship between hematoma size and the success of conservative treatment.

CONCLUSION

Conservative treatment of retroperitoneal puerperal hematoma with good clinical evolution, depends on status of the patient, cause of injury and its evolution.

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AUTHOR CONTRIBUTIONS

Sedigheh Ghasemian Dizajmehr, Farzaneh Rashidi Fakari, Mohsen Ghasemian; Contributed to conception and design. Sedigheh Ghasemian Dizajmehr; Contributed to all experimental work and interpretation of data. Sedigheh Ghasemian Dizajmehr, Farzaneh Rashidi Fakari, Mohsen Ghasemian; Drafted the manuscript, which was revised by Sedigheh Ghasemian Dizajmehr, Farzaneh Rashidi Fakari. All authors read and approved the final manuscript.

CONFLICT OF INTERESTS

None.

ETHICAL STANDARDS

Written informed consent was obtained from the patient for publication of this Case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Availability of data and materials and all relevant data are available at Motahhari Hospital, Urmia.

REFERENCES

1. Syuto T, Hatori M, Masashi N, Sekine Y, Suzuki K. Chronic expanding hematoma in the retroperitoneal space: a case report. BMC urology. 2013;13(1):60.
2. Manzini N, Madiba T. The management of retroperitoneal haematoma discovered at laparotomy for trauma. Injury. 2014;45(9):1378-83.
3. Bageacu S, Kaczmarek D, Porcheron J. Management of traumatic retroperitoneal hematoma. Journal de chirurgie. 2004;141(4):243-9.
4. Sultan J, Bilal B, Kiran H, Bilal H, Yusuf A.

Management of retroperitoneal haematoma. Professional Medical Journal. 2005;12:230-6.
5. Sunga KL, Bellolio MF, Gilmore RM, Cabrera D. Spontaneous retroperitoneal hematoma: etiology, characteristics, management, and outcome. The Journal of emergency medicine. 2012;43(2):e157-e61.
6. Singh J, Basu S, Aich A, Bhal P. Spontaneous ischiorectal and retro-peritoneal haematoma after normal vaginal delivery. Journal of Obstetrics and Gynaecology. 2008;28(8):798-9.
7. Burnett R, Carfrae D. Spontaneous rupture of ovarian artery aneurysm in the puerperium two case reports and a review of the literature. BJOG: An International Journal of Obstetrics & Gynaecology. 1976;83(9):744-50.
8. Chan Y, Morales J, Reidy J, Taylor P. Management of spontaneous and iatrogenic retroperitoneal haemorrhage: conservative management, endovascular intervention or open surgery? International journal of clinical practice. 2008;62(10):1604-13.
9. Bisseling C, Hassan R, Francis H. Conservative management of a spontaneous retroperitoneal haematoma following caesarean section secondary to an arteriovenous malformation: a rare case. Journal of Obstetrics and Gynaecology. 2014;34(2):194-.
10. Feliciano DV. Management of traumatic retroperitoneal hematoma. Annals of surgery. 1990;211(2):109.
11. Aliosmanoglu I, Gul M, Kapan M, Arikanoglu Z, Taskesen F, Onder A, et al. The impact of etiological factors on mortality in retroperitoneal hematomas. Annali italiani di chirurgia. 2013;84(1):19-24.
12. Ruseva R, Tonev A, Zlatarov A, Hadzhiveli M, Ivanov G, Andonov B, et al. Retroperitoneal Hematoma–a Case Report. Scripta Scientifica Vox Studentium. 2017;1(1).
13. Monib S, Ritchie A, Thabet E. Idiopathic retroperitoneal hematoma. Journal of surgical technique and case report. 2011;3(1).
14. Midwinter MJ, Woolley T. Resuscitation and coagulation in the severely injured trauma patient. Philosophical Transactions of the Royal Society B: Biological Sciences. 2011;366(1562):192-203.
15. Mohanty K, Musso D, Powell JN, Kortbeek JB, Kirkpatrick AW. Emergent management of pelvic ring injuries: an update. Canadian journal of surgery. 2005;48(1):49.
16. Segabinazzi D, Brescianini BC, Schneider FG, Mendes FF. Conservative treatment of hematoma after spinal anesthesia: case report and literature review. Revista brasileira de anestesiologia. 2007;57(2):188-94.