INTERNAL ILIAC ARTERY LIGATION FOR SECONDARY POST OPERATIVE HAEMORRHAGE

by

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Internal iliac artery ligation has only recently received attention in the literature, although it has been a common practice for many years with those surgeons doing Werthiem's hysterectomy, pelvic exenteration and other extensive pelvic procedures.

Three quarters of a century have elapsed since the first internal iliac artery ligation was performed for precarious pelvic haemorrhage. Even today serious haemorrhage is the leading cause of death which could be preventable in many cases by this simple, safe and effective procedure.

The procedure is life saving and as such, the operation should be thoroughly familiar to all those who practice obstetrics or perform pelvic surgery. The technique is easy and there are minimal contraindications for the procedure.

Postoperative vaginal bleeding is relatively rare as a complication of total abdominal or vaginal hysterectomy. When it does occur it can be the most serious requiring emmergency treatment.

This is the case report where intractable vaginal bleeding following abdominal hysterectomy was treated by bilateral ligation of internal iliac artery which was lifesaving measure for uncontrollable secondary postoperative haemorrhage.

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CASE REPORT

Mrs. S. P. age 38 years was admitted on 11-2-75 with c/o profuse vaginal bleeding during menstruation since 6 years and frequent cycles. Weakness and giddiness was there for same duration. No other complaints were present.

Patient had 5 living children, all alive and well. Last childbirth was 8 years back. She had no complication during pregnancy, labour or puerperium. Her previous menstrual cycles were regular. For the last 6 years the cycles were 8-10/18-20 days, profuse painless flow with history of passing blood clots. Dilatation and curettage was done 1 year back for the same complaints at Yeotmal.

On Examination she was moderately built healthy woman. Pulse 90 per minute B.P. 120/80 mm. Hg. There was a haemic murmur due to haemodynamic changes. Other systemic examination was normal. On vaginal examination cervix was healthy. There was second degree descent of cervix and a small cystocele and rectocele. The uterus was retroverted, bulky, mobile. Fornices were free. Provisional diagnosis of functional uterine haemorrhage was made and the patient was put on antianemic treatment.

Investigations showed Hb%-8 gms%. Peripheral smear revealed hypochromic microcytic anaemia. T.L.C., D.L.C., clotting time, bleeding time, platelet count were within normal limit. Blood group O Rh + ve.

Urine examination was normal.

After improvement of haematological status of the patient, curettage was done in premenstrual

phase. Report was Metropathia haemorrhagia.

Because of long history of cyclical menorrhagia and failure of hormonal treatment hysterectomy was planned on 26-2-75 by vaginal route.

Under spinal anaesthesia as the vaginal hysterectomy was being done Mackenrodt and uterosacrals ligament were clamped and cut. The uterine pedicles slipped on left side and retracted. So vaginal operation was abandoned and abdomen was opened by subumbilical midline incision and total abdominal hysterectomy and left Salpingo-oophorectomy was done. It was observed that the uterine artery was seen coursing 2 cms lateral to the lateral border of the uterus at the level of round ligament. On the right side the course of uterine artery was normal. The aberrant uterine artery was easily traced for 4 cms. in its course. There was no other aberrant vessel. The anterior colporrhaphy was done by the vaginal route.

Total blood loss was replaced at the same time. Antibiotic therapy was instituted. The patient made a good recovery in the immediate postoperative period. Abdomen wound healed well.

On the 10th postoperative day, the patient started bleeding per vaginam. Speculum examination showed that blood was coming from the vault and it was old collected blood. Colporrhaphy wound was gaping. After cleaning the local part, acriflavin vaginal packing was done. The patient was given gyn. (C.V.P.) 1 Capsule 4 hourly and adrolate 2 c.c. 6 hourly.

Bleeding was controlled for 24 hours following which the patient began to bleed again., through the pack and required removal of pack and another pack was put. Patient received 600 c.cs of fresh blood transfusion. There was slight foul smelling discharge. Broad spectrum antibiotics were started. This controlled her vaginal bleeding.

But on 22nd postoperative day the patient had profuse bleeding from the vagina. Big clots were removed. On inspection the bleeding seemed to be coming from the vault as a generalised ooze and it was a fresh blood. Definite bleeder could not be seen. So it was decided to do an emergency ligation of internal iliac arteries.

The condition of the patient was not satisfactory. Both internal iliac arteries were ligated by extraperitoneal route with non-absorbable silk sutures. Both incisions were closed in layers after closing muscle with interrupted catgut sutures. Drain was kept. Patient received about 500 ccs of fresh blood transfusion. Patient made a good recovery in postoperative period and bleeding was promptly controlled. Stitches were removed on 9th day.

Speculum examination on 10th postoperative day revealed vault to be healthy except slight raw area in the anterior colporraphy wound. She was given general treatment to improve her anaemia and was discharged with Hb 12 gms% on discharge.

Discussion

Vaginal bleeding following hysterectomy may be caused by one of the several factors as, inadequate loose sutures, inclusion of too much tissue in the suture leading to necrosis and resultant sloughing. Improper suturing of lateral vaginal angles, Slipping of a ligature or erosion into the uterine artery by infection. So adequate haemostasis and double ligation of large vessel is important.

This was life threatening bout of secondary haemorrhage which was controlled by extraperitoneal ligation of internal iliac artery. This is a very simple operation without any shock and hence it should not be last resort but should be thought earlier.

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