INTERNAL ILIAC ARTERY LIGATION

by

H. S. ADENWALLA,* M.S. (Bom)

ACHAPILLA JOSEPH,** M.B.,B.S., D.G.O.

and

R. R. EVANGELINE,*** M.D., D.G.O.

Introduction

It is an accepted and well known fact that hypogastric artery ligation is a life saving procedure in cases of intractable haemorrhage from the uterus and vagina. It dates back to 1894 when Howard Kelly used it for the first time in a case of invasive carcinoma of cervix after failing to perform hysterectomy. Pryor in 1894 ligated the internal iliac artery for all recurrent uterine malignancies and advised its use prophylactically prior to hysterectomy. In 1954 Hecht and Bluementhal used it for recurrent bleeding from vaginal vault following hysterectomy. In 1955 Decker adopted the method for postoperative haemorrhage. In 1960 Sagarra, *et al* used it in cases of postpartum haemorrhage. Daro *et al* used it in cases of bleeding cancer cervix.

Here 3 cases have been reported where internal iliac artery ligation was done to control secondary vaginal haemorrhage.

CASE REPORTS

Case 1

Mrs. M., 41 years old, mother of 12 children was admitted to our hospital on 11-3-1974 with history of severe vaginal bleeding since 5 days. Patient started to bleed from the 14th postoperative day following anterior and posterior colpoperiniorrhaphy.

Physical examination showed an anaemic individual with a HB level of 8.7 Gms. Pulse was thin and rapid. Blood pressure was 100/70. Urgent investigations revealed bleeding time 7 minutes and clotting time 5 minutes. Platelets count 100000/cc and prothrombin time 16 seconds (control 14 seconds).

Since there was severe bleeding and the tissue was friable tight vaginal pack was applied under general anaesthesia. Five pints of blood were transfused. Daily packing was done till 17-3-1974. When there was no abatement of haemorrhage, bilateral internal iliac artery ligation was done which arrested the bleeding immediately.

Patient was discharged in good condition on 6-4-1974 and continues to be in good health till now.

Case 2

A 27 year old woman with 4 living children had a total abdominal hysterectomy and appendicectomy on 19-4-1976 in our hospital for dysfunctional uterine bleeding. Patient was discharged in good condition on the 14th postoperative day and returned with severe secondary vaginal bleeding on the 28th postoperative day. Bleeding could not be controlled with tight vaginal packing. Hence bilateral internal iliac artery ligation was done on the 3rd day (21-5-1976). Patient was discharged in good condition on 1-6-1976.

Investigations

Bleeding time 4 minutes, clotting time 13 minutes, platelets count 2,54000/cc., Hb. 9.2 gms.%.

*General Surgeon, Medical Superintendent, Principal, Medical Officer & Chief Surgeon,

**Head of the Department of Obstetrics & Gynaecology.

***Consultant Obstetrician and Gynaecologist. J.M. Hospital, Trichur-5.

Accepted for publication on 6-3-1978.

Case 3

Mrs. T., aged 39, G3 P2 was admitted to our hospital on 8-10-1977 for confinement. She gave birth to a live female baby weighing 3.4 kgs. The next day at 11.45 a.m. Uterus was well contraced and there was no evidence of any cervical tear.

Patient went into shock at 4 a.m. on 10-10-1977. Vital signs showed a thready, rapid pulse and an unrecordable blood pressure. Abdominal examination revealed a boggy mass in the lower abdomen extending up to the umbilicus distinct from the uterine mass. Vaginal examination showed a big haematoma on the right lateral wall of the vagina. After recuperating the patient with 3 pints of blood abdomen was opened and found an oedematous bladder and a huge broad ligament haematoma. To avoid injury to the ureter and bladder, haematoma was evacuated per vagina after incising the lateral vaginal wall. A tight pack was kept in the cavity. When the pack was removed after 36 hours there was fresh bleeding. Hence unilateral internal iliac artery ligation on the right side was done on 11-10-1977. Patient had to remain in the hospital for wound healing and was discharged in good condition on 29-10-1977.

Conclusion

Three cases where internal iliac artery ligation was done have been reported. One for obstetrical and two for gynaecological indications.

Acknowledgement

The authors wish to thank the Very Rev. Msgr. Mathew Muringathery, Director of the Jubilee Mission Hospital for the permission to report these cases.

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