

A REVIEW ON HAEMORRHAGE AFTER GYNAECOLOGICAL SURGERY

by

B. K. GOSWAMI,* D.G.O., M.S. (Cal)

A. MONDAL,** M.B.B.S. (Cal)

and

C. S. DAWN,*** M.O., Ph.D. (Cal) F.R.C.O.G. (Lond)

Haemorrhage after gynaecological major operations is not uncommon. Primary haemorrhage is the result of failure to control one or more large vessels, often an artery (Jeffeoate, 1967). Secondary haemorrhage is more common and the blood loss sometimes is alarming necessitating massive blood transfusion. Often the haemorrhage occurs repeatedly and puts the surgeon in a dilemma as to the next line of treatment.

Three cases of primary and 21 of secondary haemorrhage were treated in

Eden Hospital, Calcutta, from January, 1979 to July, 1980. Table I shows distribution of the cases. This survey does not include cases following electrocautery, amputation of cervix and radical hysterectomy. All the operations were planned and the haemoglobin was 9.2 to 12 gm% (average 10.8 gm%). Other laboratory investigations had normal values. Only 3 cases received blood transfusion during primary operation. Secondary haemorrhage in 14 occurred in the hospital and 5 cases were readmitted after discharge.

TABLE I
Distribution of Cases

| Operations | Number | Primary haemorrhage | Secondary haemorrhage |
|------------------------|--------|---------------------|-----------------------|
| Abdominal hysterectomy | 540 | 1 (0.18%) | 12 (2.22%) |
| Ward Mayo's operation | 290 | — | 5 (1.72%) |
| Fothergill's operation | 80 | — | 3 (3.75%) |
| P.F.R. | 110 | 1 (0.90%) | 1 (0.905) |
| Conisation | 10 | 1 (10%) | — |
| | 1030 | 3 | 21 |

* Resident Surgeon.

** Resident House Surgeon.

*** Head of the Department, Eden Hospital, Medical College, Calcutta.

* At present—Gynaecologist, Sub-Divisional Hospital, Diamond Harbour.

Accepted for publication on 4-9-81,

One each of P.F.R. and Ward Mayo's operation were admitted following operation done in Nursing homes.

Observation

Six patients were aged between 20-30 years, 11 between 31-40 and 7 between

41-50 years. Seven cases were para—1-2, 6 para—3-4, 6 para—5-6 and 5 para—7-11. Of 13 abdominal hysterectomies, dysfunctional uterine haemorrhage was the indication in 7 and fibroid in 6. Ten cases had urogenital prolapse and 1 had chronic cervicitis.

Management

Primary haemorrhage occurred 4 hours after abdominal hysterectomy. The vagina was tightly packed. After 18 hours, she had massive bleeding and under anaesthesia, it was found that the source was both the angles of the vault. Deep mattress sutures were placed with atraumatic catgut and 2 units of blood were transfused. At primary operation, the descending cervical artery, parametrial tissues and vaginal angles were included in one ligation which may be the cause of haemorrhage. One case of P.F.R. had profuse blood loss 16 hours after operation. Under anaesthesia, the source was found to be the top of colpo-perineorrhaphy wound. Three interrupted stiches were inserted. The case of conisation had massive haemorrhage 22 hours after and needed both cauterisation and suturing.

Secondary haemorrhage occurred in between 7th-9th postoperative day in 8 cases, 10th-12th day in 9, 13th-15th day in 3 and 16th day in 1. In the postoperative period, 4 cases had mild and 6 cases had moderate temperature. In 10 cases, there was no evident infection. The bleeding was profuse in 10 cases. The haemoglobin varied between 8.4-10.2 gm%, with an average of 9 gm%.

On examination, the bleeding was noted from entire vault in 4, both angles in 8, one angle in 3, cervical stump in 2, anterior colpoorrhaphy wound in 1 and colpo-perineorrhaphy wound in 3.

Besides intravenous fluid and antibiotics, blood was transfused in 13 cases from 1-12 units. Two cases were treated by recumbency alone, 4 by vaginal packing with glycerine acriflavin and 15 by suturing. Two cases of abdominal hysterectomy required ligation of internal iliac arteries 12 and 13 days after resuturing for recurrence of bleeding.

Two Cases Deserve Special Mention

Case 7. B.K. aged 42 years, Para 6 + 0, had abdominal hysterectomy for D.U.H. on 19-5-79. She had temperature 100-101°F. for 3 days from 3rd postoperative day. From 10th day. She had slight vaginal bleeding. On 13th day, she had appreciable blood loss. Vagina was packed in the ward which was washed away by massive blood loss after 4 hours. She had severe shock and after resuscitation with 3 units of blood, heavy dose of steroid etc. she was examined under anaesthesia and the angles of the vault were sutured. On the same day 7 units of blood were transfused, yet her haemoglobin was 6.5 gm% next day. She started slight oozing from 12th day of resuture and the vagina was packed again. On 14th day ligation of internal iliac arteries was done. She had urinary tract infection, pulmonary congestion and progressive anaemia. Urine culture showed klebsiella pneumonae. As her haemogram showed no improvement inspite of 10 units of blood, she was transferred to haematology department subsequently.

Case 15. K.B. 32 years, Para 2 + 1, had P.F.R. in a Nursing home on 29-2-80. She had temperature, urinary tract infection, secondary haemorrhage on 12th post operative day and had suturing under anaesthesia. Subsequently she had suturing and packing 4 times and lastly packing alone on 24-3-80. By then she had 10

units of blood. Two senior gynaecologists tackling her were at a loss and transferred her to this hospital on 25th day. She was completely demoralised having lost all hopes of recovery. The oozing was moderate and coming from top of colpo-periorrhaphy wound. A tear was found on left vaginal wall possibly resulting from repeated insertion of speculum and packing. The bleeding points were secured with atraumatic 'O' catgut and the wounds were repaired with monofilament nylon. Two units of blood were transfused again. There was moderate temperature for 3 days and urinary tract infection. She recovered and went home after 15 days.

Excepting these 2 cases, the postoperative period was uneventful and they were discharged after 7 to 33 days of secondary haemorrhage. There was no death in the present series.

Discussion

The incidence of primary haemorrhage in this study was very low and fortunately there was no case of intraperitoneal haemorrhage. Among 16 cases of haemorrhage, Chakraborty and Dutta (1979) found internal haemorrhage in 5 following abdominal and vaginal hysterectomies. As effective tamponade is impossible without anaesthesia and is nearly always followed by infection and breakdown of wound, it should, as a rule, be treated by suturing the bleeding area (Jeffcoate, 1967).

The occurrence of secondary haemorrhage (Table I) was also low as compared to that of Chowdhuri (1973). He found it in 7% following vaginal hysterectomy and 10% after Manchester operation. Kerkar (1971) observed it in 2% of Fothergill's operation. It is more following amputation of cervix (Peel, 1958) as was also found in our study. Significant

to note that it was more following abdominal hysterectomy than vaginal which is contrary to the usual belief. Secondary haemorrhage is nearly always the result of a low grade infection (Peel, 1958; Jeffcoate, 1967) although we did not find evidence of apparent infection in about 50% cases. But culture of vaginal swab was not done.

Majority of our cases had resuturing which is a controversial issue. While Jeffcoate (1967) considers tight vaginal packing sufficient and suturing practically impossible in a friable and oedematous tissue, the ideal surgical procedure is to identify and ligate the bleeding vessels (Howkins and Stallworthy, 1974). Figure-of-eight suture on atraumatic needle, as we found, is effective. If it cuts out one should go for tight packing. Packing should not be done without anaesthesia as was done in one of our cases. When bleeding is slight, as in 5 of our cases only recumbency, hot douche (Jeffcoate, 1967) or glycerine acriflavin instillation after evacuation of clots is effective. Deep mattress suture was passed around the bleeding area in Fothergill's cases which is advocated by Peel (1958) but Kerkar (1971) treated it by packing alone. For recurrent haemorrhage repacking is advocated (Jeffcoate, 1967) but it failed in all the 3 cases, 2 of whom needed ligation of internal iliac arteries. Although it is an accepted choice in primary intraperitoneal haemorrhage, no reference is found in the literature as to its scope in secondary haemorrhage. Massone (1966) consulted 137 noted gynaecologists of different parts of the world and did not find it to be a popular procedure. Its real indications are relatively rare, hence experience with this operation is limited (Das, 1974).

Another significant observation in this

series is that the haemoglobin on an average came down to 9 gm% from 10.8. It is due to blood loss during operation or infection. Perhaps we underestimate the blood loss during primary operation and the resultant anaemia invites infection in spite of prophylactic antibiotics. In practice, some amount of bleeding is ignored particularly during vaginal operations which, if continues, becomes a good media for bacteria. One should pay more attention to haemostasis or go back to routine vaginal packing for 24 hours.

Due to paucity of beds, usually we discharge these cases between 7th to 9th day. But in 12 (57%) cases secondary haemorrhage occurred between 10th to 15th day, 5 of whom had to be readmitted. Ideally, one should keep these cases for 2 weeks after operation as a routine.

Acknowledgement

We are thankful to the Principal and

Superintendent, Medical College, Calcutta, for their kind permission to publish the Hospital records.

References

1. Das, K.: *J. Obstet. Gynec. India.* 24: 413, 1974.
2. Chakraborty, B. N. and Dutta, D. C.: *J. Obstet. Gynec. India.* 29: 853, 1979.
3. Chaudhuri, S. K.: *J. Obstet. Gynec. India.* 23: 178, 1973.
4. Howkins, J. and Stallworthy, J.: 'Bonney's Gynaecological Surgery' 8th Ed., London, Bailliere Tindall, 1974. P. 505, 524.
5. Jeffcoate, T. N. A.: 'Principles of Gynaecology' 3rd Ed., London, Butterworths & Co. Ltd., 1967, P. 909.
6. Kerkar, A. V.: *J. Obstet. Gynec. India.* 21: 748, 1971.
7. Massone: Quoted by Greenhill, J. P., 'Year Book of Obstet. & Gynaecology', 1967-68, Chicago, P. 448.
8. Peel, J. H.: 'British Gynaecological Practice' 2nd Ed. London, W. Heinemann, 1958, P. 814.