

Coagulation Failure in Abruptio Placentae

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Summary

Obstetrics is "bloody business". Coagulation failure has been found to complicate 4-5% of cases of abruptio placentae. 5 cases who presented with coagulation failure during a period of eighteen months [1/1/93 to 30/6/94] were studied at Sassoon General Hospital Pune. The incidence of coagulation failure was 4.3%. In 3 cases the abruption delivery interval was more than 8 hours and in 4 cases retroplacental clot weighed more than 8 hours and in 4 cases retroplacental clot weighed more than 300gm. In all the cases coagulation profile was maintained and CVP monitored in 3 cases. 4 cases were transfused with blood and FFP. 1 case landed in ARF and 1 died undelivered.

Introduction

Obstetrics is "bloody business" – are the words of William Hunter. 3.5% of all pregnancies are associated with third trimester bleeding and 32% are diagnosed as placental abruption [Douglas Knab - 1978].

Coagulation failure is one of the most grave complications of accidental haemorrhage. It has been observed to complicate 4-5% of cases of abruptio placentae.

An analysis of five cases of coagulation failure treated over a period of eighteen months [1/1/1993 to 30/6/1994] at Sassoon general hospital, Pune is presented herewith.

Observations

Table I: Shows the incidence of coagulation failure.

Total number of cases admitted with the diagnosis of accidental haemorrhage were 116, out of which 5 cases

presented with coagulation failure giving an incidence of 4.3% which is comparable to Palaniappan's 4.2% (1984).

4 cases developed coagulation failure after delivery while 1 had coagulation abnormality on admission and died undelivered.

Table I: Incidence of Coagulation failure

Total number of cases	116
Number of cases with coagulation failure	5 (4.3%)

Table II Shows the clinical features

- All the cases presented with bleeding from the uterus.
- In addition 3 cases presented with haematuria and developed bleeding from the prick sites.

Table II: Clinical Feature

Bleeding sites :	Uterine	5
	Haematuria	3
	Pricksite	3

Table III Shows mode of delivery

- a) The abruption admission interval in 2 cases was less than 8 hours while in 3 cases it was more than 15 hours. Labour was induced in all the cases with amniotomy followed by oxytocin.
- b) 3 cases delivered vaginally while 1 case was subjected to LSCS for furious haemorrhage with closed cervix. All the cases delivered fresh stillbirth. 1 case died undelivered within 2 hours of admission.
- c) The abruption delivery interval in only one case was less than 8 hours.

Table III : Mode of delivery

A)	
Vaginal	3
LSCS	1
Undelivered	1
B) <u>Abruption admission interval</u>	
Less than 8 hours	2
More than 15 hours	3
C) <u>Abruption delivery interval</u>	
Less than 8 hours	1
More than 8 hours	3

Table IV Shows the weight of retroplacental clot.

Blood loss in concealed haemorrhage is large and clinically difficult to estimate resulting into serious undertransfusion. Only one case had clot weighing 300gm while 3 cases had clot weight more than 500gm. O'Driscoll et al (1966) has described use of CVP as a guide to adequate blood replacement and lowering the incidence of renal complications. In 3 cases volume status was monitored with a CVP line.

Table IV Weight of RP clot

300gm	1
more than 500 gm	3

Table V Shows the coagulation profile maintained

In all the cases monitoring of coagulation status was done with the help of bedside tests like bleeding time; clotting time; clot observation test whereas laboratory investigations include platelet estimation and prothrombin time. The values were found to be abnormal in all the cases and platelet count was < 50,000/cmm. in 1 case.

Table V : Coagulation profile

Bedside tests	Laboratory
Bleeding time	Platelet estimation
Clotting time	Prothrombin time
Clot observation test	

Table VI Shows the treatment given.

The amount of replacement transtusion varied from 4 to 7 bottles of blood and 2 units of fresh frozen plasma to every case. Blood components like fibrinogen were not available. Only FFP was available which was immediately given in all cases. In addition 3 cases who suffered from atonic PPH were given Injection PGF2alfa. 2 cases were monitored on Dopamine drip.

Table VI : Treatment given

Blood transfusion	4
FFP	4
Injection PGF 2 alfa	3
Dopamine	

Table VII Shows the complications encountered

1 case presented here manifested with ARF at home. The abruption delivery interval was 21 hours. She was anuric for 36 hours and required haemodialysis twice. 1 case died within 2 hours of admission. She was brought in a critical condition. The abruption admission interval was 22 hours. She could not reach the hospital early due to domestic and transport difficulties.

Table VII : Complications encountered

ARF	1
Death	1

Conclusion

Diagnosis of abruption is often missed at periphery due to concealed haemorrhage. High index of suspicion and timely referral needs to be emphasized. The diagnostic acumen of medical practitioners at periphery should be improved stressing the significance of severe pallor with tachycardia and foetal death in favour of abruption.

Laboratory facilities should be improved which includes estimation of fibrinogen and FDP levels.

For the treatment of coagulation failure liberal and prompt fresh blood transfusion is a must. Blood components should also be made available. Adequacy of blood replacement should be ensured by correct monitoring of volume status by measuring CVP.

Efforts must be made to hasten delivery and surgical intervention should not be delayed for cases with unsatisfactory response to induction procedures. Such cases should be managed in tertiary centers where adequate replacement facilities are available which can help to reduce maternal morbidity and mortality.

References

- 1] Douglas Knab R. *Obstet. Gynaec.*: 625. 1978
- 2] Palaniappan B. J. *Obst. Gyn India* 34. 77. 1984