

POSTPARTUM COMPLICATIONS IN ECLAMPSIA

by

KAMAL K. DESHMUKH*

and

R. ANJANEYULU**

Pre-eclampsia and eclampsia continue to impose significant danger to mother and foetus. Postpartum eclampsia or severe pre-eclampsia can result in morbidity and mortality in the postpartum period due to complications like cerebral haemorrhage, cardiac or renal failure or pulmonary oedema. The present study was undertaken to study maternal complications in immediate postpartum period in cases of eclampsia.

Material and Methods

Between January 1966 to December 1977, 88 patients of eclampsia were admitted in J.J. Hospital, Bombay. Out of 88 patients of eclampsia, 2 died undelivered and 2 went against medical advice before delivery. Thus postpartum complications could be studied only in 84 cases of eclampsia. During the same period there were 31,717 deliveries in the hospital and thus the incidence of eclampsia was 1 in 360 deliveries.

Observations

The age of the patients ranged from 15 to 43 years. Thirty-eight patients (42.27 per cent) were below the age of 20. The liability of eclampsia is very much greater during the first than any subsequent

pregnancy. Out of 88 cases of eclampsia, 62 cases (70.5%) were primiparas and only 26 (29.5%) were multiparas.

TABLE I

Postpartum Complications in Eclampsia

Complication	No. of cases	Percentage
1. Urinary infection	11	13.0
2. Persistent hypertension	6	7.1
3. Puerperal psychosis	2	2.2
4. Prolonged coma	1	1.1
5. Visual disturbances	1	1.1
6. Pulmonary oedema	2	2.1
7. Hyperpyrexia	1	1.1
8. Hepato-renal failure	1	1.1

Forty-three patients (49%) developed eclampsia before the onset of labour; 21 (23.8%) after the onset of labour and 24 (27.2%) after delivery. Antepartum eclampsia was comparatively more common due to lack of effective antenatal care and prompt treatment of severe and fulminating pre-eclampsia. Sixty-three patients (71.59%) were admitted as emergencies without antenatal supervision.

Out of 42 patients of antepartum eclampsia, there were 2 cases of "Inter-current eclampsia". One patient delivered spontaneously after 10 days and the other went against medical advice. All cases were treated with sedatives, diuretics and selected cases with antihyper-

* Associate Professor in Obstetrics & Gynaecology.

** Professor-Director in Obstetrics & Gynaecology.

Accepted for publication on 7-2-79.

tensive drugs. Active interference to terminate pregnancy was not done.

Convulsions in Postpartum Period: Twenty-four patients (27.2%) had first eclamptic fit in the postpartum period. In 2 patients of postpartum eclampsia onset of the convulsion was delayed for more than 24 hours after labour. Fourteen patients of intrapartum eclampsia and 4 cases of antepartum eclampsia continued convulsions even after delivery. Fifty-one per cent of patients had postpartum convulsions. This emphasizes that the eclampsia patients must be well sedated for 48 to 72 hours after delivery to prevent convulsions.

Total number of days in the hospital after delivery varied from 4 to 42. Thirty-six patients (42.8%) were discharged within 8 days, 30 within 8 to 15 days, 12 within 16 to 30 days, but 6 patients (7.1%) required hospitalization for more than 30 days.

Complications in Postpartum Period: Minor and major complications were observed in 25 patients of eclampsia and thus postpartum complication rate was 29.7% (Table I).

(1) *Urinary Infection:* Urine analysis revealed urinary infection in 11 cases (13%) in the postpartum period. This may be due to prolonged catheterization. Majodidi *et al* (1973) reported urinary abnormality in 10 per cent of his series but Bedford (1972) reported very high incidence of 30 per cent in his series.

(2) *Relation of Eclampsia to Subsequent Hypertension:* Whether pre-eclampsia or eclampsia actually causes chronic hypertension is a subject of debate. Many follow-up studies have been made of women thought to have had pre-eclampsia and the frequency of chronic hypertension has ranged from 2 to more than 60 per cent (Chesley *et al*,

1976). In this study in 78 patients (92.9%) blood pressure came to normal before discharge. Only in 6 cases (7.1%) blood pressure remained more than 140 mm of Hg. systolic and 90 mm of Hg. diastolic before discharge. Two patients had essential hypertension and 1 had renal hypertension. Subsequently retrograde pyelography in a patient having renal hypertension showed non-functioning left kidney. After nephrectomy of atrophic kidney, systolic blood pressure came down from 220 mm. to 130 mm of Hg and diastolic from 140 mm to 78 mm Hg.

(3) *Puerperal Psychosis:* Two patients of antepartum eclampsia (2.2%) developed puerperal psychosis. One was primipara and the other was multipara delivered prematurely. Both recovered from post-eclamptic psychosis after treatment.

(4) *Prolonged Coma:* One case of postpartum eclampsia of 40 years, eighth gravida, was unconscious for 7 days after first convulsion 7 hours after normal home delivery. Intracranial and metabolic causes of coma were excluded. Patient recovered gradually and was discharged after 4 weeks with normal blood pressure.

(5) *Visual Disturbances:* One patient (1.1%) had visual disturbances and diminished vision when she began to come out of coma. Funduscopy showed nothing abnormal. Patient recovered gradually 1 week after delivery.

(6) *Pulmonary Oedema:* There was pulmonary oedema in 2 cases of postpartum eclampsia and 1 fatal case developed hyperpyrexia.

One case of antepartum eclampsia developed hepato-renal failure 3 days after delivery. Patient had icterus, palpable and tender liver and oliguria. Patient

recovered with treatment and was discharged after 3 weeks.

Maternal Mortality: Maternal mortality rate reported from different parts of the world for various methods of treatment ranged from zero to as much as 20.3 per cent. (Menon 1961; Lahiri 1970; Lean *et al* 1968; Kawathekar *et al* 1973). In this series there were 3 maternal deaths, 2 antepartum and 1 postpartum, thus accounting for 3.4 per cent maternal mortality rate. None of the fatal cases in this series had antenatal care. Postpartum death was in a young primigravida admitted 2 days after home delivery in semiconscious state following history of continuous convulsions for 18 hours. On admission patient had 105°F temperature, slight oedema, albuminuria and B.P. 180/110 mm. of Hg. Other 2 antepartum deaths were within 13 hours of hospitalization. One patient died of pulmonary oedema with respiratory failure and second patient had bilateral pneumonic consolidation with massive necrosis of liver.

Summary and Conclusion

(1) Postpartum complications were observed in 25 out of 84 cases of

eclampsia. Complication rate was 29.7 per cent. (2) The maternal mortality rate was 3.4 per cent. (3) One postpartum death was due to hyperpyrexia. (4) Prompt and early treatment in severe pre-eclampsia may help in preventing eclampsia and complications associated with it.

Acknowledgement

We are thankful to Dr. K. D. Sharma, Dean, Grant Medical College and J.J. Hospital, Bombay, for allowing the use of hospital data.

References

1. Chesley, L. C., Annitto, J. E. and Cosgrove, R. A.: *Am. J. Obstet. Gynec.* 124: 446, 1976.
2. Kawathekar, P., Anusaya, S. R. and Srinivas, P. L.: *Curr. Ther. Res.* 15: 845, 1973.
3. Lahiri, B. C.: *J. Obstet. Gynec. India.* 20: 336, 1970.
4. Lean, T. H., Ratnam, S. S. and Sivasambu, R.: *J. Obstet. Gynec. Brit. C'wth.* 75: 856, 1970.
5. Menon, M. K. K.: *J. Obstet. Gynec. Brit. C'wth.* 68: 417, 1961.
6. Majadidi, Q. and Thompson, R. J.: *South Med. J.* 66: 414: 1973.