BioMedSciDirect Publications

Contents lists available at BioMedSciDirect Publications

International Journal of Biological & Medical Research

Journal homepage: www.biomedscidirect.com

Case report

Anaesthesia management for a case of chorea gravidarum

Sujatha Papireddy, Ravi Madhusudhana*, Somasekharam Potli, Dinesh Karthik, Kishore Kumar.

** Department of Anaesthesiology and intensive care, Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka.563101*

ARTICLE INFO

Keywords:
Anaesthesia
Chorea Gravidarum
Rheumatic Fever

ABSTRACT

Chorea gravidarum is the term given to chorea occurring during pregnancy. It is not an etiologically or pathologically distinct morbid entity, but a generic term for chorea of any etiology. We report a case of Chorea Gravidarum who doesn't have the past h/o Rheumatic fever, Sydenham's chorea in childhood. Factors associated with recurrence of chorea, their aggrevating factors during pregnancy and its management have been discussed.

© Copyright 2010 BioMedSciDirect Publications IJBMR -ISSN: 0976:6685. All rights reserved.

1. Introduction

Many reasons are quoted as causes leading to chorea gravidarum, it may be associated with previous eclampsia and effects on basal ganglia, manifestation of rheumatic fever, antibasal ganglia antibodies, effect of Estrogen and progestrone on Basal ganglia cells, use of oral contraceptives [1].

2.Case Report

Female patient aged 24 years, 45 kilograms, gravida 2 and living 1, presented with involuntary, abnormal movements of upper extremities and face since 2 days. She tried to hold her hands to control the movement and had slurred speech. No other neurological deficits were observed. She had past history of sore throat and fever and no similar complaints in the family. Neurophysician had put her on Tab Diazepam 5 milligram (mg) twice daily from two days. She had a previous uneventful caesarean section. Investigations were within normal limits, except for a high CRP (6) and ASLO titre (200). Echo showed mild Mitral Regurgitation, Trivial Aortic Regurgitation and Mild Pulmonary artery hypertension (PAH).The indication for surgery was failure to progress with foetal distress. General anaesthesia was planned with a goal to minimise the abnormal movements, airway protection, stable hemodynamics, safe confinement, rapid and safe recovery. Antibiotic prophylaxis given, premedicated with Inj Rantac 50mg, Inj Glycopyrollate 0.2mg I.V; Preoxygenated for 3 min, anaesthesia induced with Inj Thiopentone 200mg, cricoid pressure applied, inj xylocard 50 mg, Inj suxamethonium 75mg, Intubated with a cuffed endotracheal tube (size 7.0) , cuff inflated and cricoid pressure released. Maintained with nitrous oxide and Oxygen 50:50, Isoflurane 0.2-0.4 % ,Inj Vecuronium(4+ 1 mg increments). Neuromuscular blockade reversed with Inj Neostigmine 2.5 mg, Glycopyrollate 0.4 mg and Inj Xylocard 50 mg to avoid extubation pressor response. The average heart rate was 88-90 /min and blood pressure 112-120 mmhg systolic, during the perioperative period.

Child was healthy, cried immediately, APGAR 10 at one minute. MRI brain of mother showed a normal study. Abnormal movements were not seen in the post operative period and subsequent days in hospital. She was continued on Tab Diazepam 5 mg twice daily.

3. Discussion

The presentation (Valvular Heart Disease) and investigations (ASLO titre and CRP) point out in favour of Rheumatic Heart disease and Chorea gravidarum [2]. Mild regurgitant lesions tolerate tachycardia well and nitrous oxide can be avoided in Severe PAH. Patients on treatment for chorea for a long period may have delayed recovery with anaesthetic agents (Thiopentone, suxamethonium, halothane) [3]. Thiopentone may cause delayed awakening, rapid recovery is reported with propofol , they may be sensitive to nondepolarising relaxants and Pseudocholinesterase deficiency is also reported, Mivacurium and atracurium can be used [4].

* Corresponding Author : Dr.Ravi Madhusudhana.
Associate Professor,
Department of Anaesthesiology and intensive care,
Sri Devaraj Urs Medical College,
Tamaka, Kolar, Karnataka.563101.
E-mail: ravijaggu@hotmail.com

©Copyright 2010 BioMedSciDirect Publications. All rights reserved.

Our patient was started on Diazepam 5mgs twice daily 2 days before and recovery was not delayed. Diazepam was used for only 2 days and is considered to be safe [6].

Risk of malformation is greatest when the fetus is exposed between two and eight weeks after conception. If the drugs are administered at or near term, they may cause fetal dependence and eventual withdrawal symptoms. Possible effects include abortion, malformation, intrauterine growth retardation, functional deficits, carcinogenesis, and mutagenesis.

The available literature suggests that it is safe to take diazepam during pregnancy but not during lactation because it can cause lethargy, sedation, and weight loss in infants [6].

Neonatal complications have been observed among infants exposed to maternal parenteral diazepam for long periods or to dosages exceeding 30 to 40 mg a day, especially intramuscular or intravenous dosages, during pregnancy and labour [8].

Maternal dose of 30 mg or less in the 15 hours before delivery had little effect on the infants' state [9].

4. Conclusion

Diazepam and Haloperidol has been used for treating this type of patients [7].General anaesthesia is preferred over regional as the movements can be uncontrollable and disturbing to the patient and doctors in conduct of surgery and anaesthesia [5].

We are reporting this rare case which needs careful planning even while conducting emergency surgery for the safe conduct of anaesthesia.

Funding: nil; Conflict of Interest: Nil.

5.References

[1] Miranda M, Cardoso F, Giovannoni G, Church A. Oral contraceptive induced chorea: another condition associated with anti -basal ganglia antibodies. J Neurol Neurosurg Psychiatry .2004; 75 (2): 327–328.

[2] Guidelines for the diagnosis of rheumatic fever. Jones Criteria, 1992 update. Special Writing Group of the Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease of the Council on Cardiovascular Disease in the Young of the American Heart Association. JAMA .1992;268 (15): 2069–2073.

[3] Nandita K, Jatin L, Sarla H. Anesthetic management of a patient with Huntington's chorea. Neurol India. 2008;56: 486-487.

[4] Yadava A , Pradip K. Battacharya , Rajnish K. Jain , Ramesh C. Agarwal. Anaesthesia and huntington's chorea. Indian J Anaesth.2006; 50 (1):47-48.

[5] Esen A, Karaaslan P, Akgun RC, Arslan G. Successful Spinal2006;103(2):512-513.

[6] Iqbal MM, Sobhan T, Ryals T. Effects of Commonly UsedBenzodiazepines on the Fetus, the Neonate, and the Nursing Infant. Psychiatr Serv .2002; 53: 39-49.

[7] Donaldson JO. Control of chorea gravidarum with haloperidol. Obstetrics and Gynaecology. 1982. 59 (3): 381 –382.

[8] Gillberg C. Floppy infant syndrome" and maternal diazepam. Lancet .1977; 2:244.

[9] Cree JE, Meyer J, Hailey DM. Diazepam in labour: its metabolism and effect on the clinical condition and thermo genesis of the newborn. Br Med J. 1973 ; 4 (5887):251-255.

© Copyright 2010 BioMedSciDirect Publications IJBMR -ISSN: 0976:6685.
All rights reserved.