

## Spinal Anaesthesia in a Patient of Swine Flu for Emergency Lower Segment Caesarean Section with Pre-Eclampsia

Abhishek Kesarwani<sup>1</sup>, Tarun Tyagi<sup>1</sup>, Atul Walzade<sup>2</sup>, Lakshmi N V<sup>2</sup>

<sup>1</sup>Student, MD Anaesthesia 3<sup>rd</sup> year, Department of Anaesthesiology Pain and Critical Care, Seth GSMedical College & KEM Hospital, Mumbai, India

<sup>2</sup>Assistant Professor, Department of Anaesthesiology Pain and Critical Care, Seth GSMedical College & KEM Hospital, Mumbai, India

<sup>2</sup>Student, MD Anaesthesia 3<sup>rd</sup> year, Department of Anaesthesiology Pain and Critical Care, Seth GSMedical College & KEM Hospital, Mumbai, India

**Abstract:** Swine flu is a human respiratory infection caused by a particular influenza virus H1N1 strain – popularly known as swine flu, first recognised in Spain. The disease carries a higher incidence of morbidity and mortality in comparison to non-pregnant patients, and is a challenge for anaesthesia management. We are reporting a case of a 25 year old female married since 5 years with G<sub>3</sub>P<sub>1</sub>L<sub>1</sub>MTP<sub>1</sub> with previous LSCS with 36 weeks of amenorrhea (by date) and known case of swine flu with pre-eclampsia admitted for safe confinement. Patient presented to our operation theatre with pain in abdomen for lower segment caesarean section in view of fetal distress.

**Key words:** Swine flu, pregnancy, spinal anaesthesia.

### I. Introduction

Swine flu virus was first identified in Mexico in April 2009. Due to its similarity with the influenza virus which caused a similar disease in pigs, it was designated as swine flu. The disease spread rapidly and evolved as a pandemic.

### II. Case-Report

A 25 year old, female, married since 5 years with G<sub>3</sub>P<sub>1</sub>L<sub>1</sub>MTP<sub>1</sub> with previous LSCS with 36 weeks of amenorrhea (by date) and recently diagnosed case of swine flu with prodromal symptoms with pre-eclampsia admitted for safe confinement. Patient is a diagnosed case of swine flu since 15 days hence started on tablet Oseltamivir 75 mg B.D since last 4 days. For pre-eclampsia she was started on: Tablet Nifedipine 10 mg QID since 4 weeks, Tablet Alpha methyl dopa 250 mg QID since 4 weeks.

#### Obstetric History:

G<sub>3</sub>P<sub>1</sub>L<sub>1</sub>MTP<sub>1</sub>

G<sub>1</sub>. FT LSCS i/v/o Fetal distress 3 years back

G<sub>2</sub>. MTP at 1.5 months of gestation 1 year back.

G<sub>3</sub> Present pregnancy

#### On Examination-

General condition was moderate.

Patient was conscious, oriented to time place and person.

Pulse- 106/min,

B.P-114/66 mm Hg, on left arm at brachial artery in supine position.

No pallor/ cyanosis/icterus/ lymphedema.

#### Systemic Examination-

Cardiovascular system-S1S2 heard, no murmur

Respiratory system-Air entry bilaterally equal and clear

Per abdominal examination showed distended abdomen with uterus extending up to xiphoid process with head of the foetus palpable at supra pubic region and heart sound heard at the level of umbilicus.

Spine examination-No any obvious deformity.

Airway examination-

Mouth opening :-> 3 fingers,

MPC I

Neck movements- Adequate range of flexion and extension

Thyromental distance-6 cm

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Investigations-

Hb-10.3

TLC-15300

Platlets-3 lakhs

With PT-12/15 and INR 0.8

Special Investigations-

RT PCR –Confirmation of swine flu was done on the basis of this investigation.\

### III. Anaesthesia Management

A written informed consent for anaesthesia was taken including explanation regarding spinal anaesthesia. Patient was taken inside OT and monitors like ECG, pulse oximetry, NIBP attached. A wide bore 18 G intravenous cannula was inserted in both upper limbs. Inj. Ondansetron 4mg i.v. given along with Inj. Ranitidine 50 mg i.v. slowly.

Fetal Heart Rate on table was 128/min. Co-loading with crystalloids (Ringer Lactate) started and preparation for spinal anaesthesia started. Procedure was performed in sitting position. Under all aseptic precautions painting and draping done on the back and subarachnoid block given with 23 G Quincke's spinal needle by median approach. 2.2 cc of 0.5% heavy inj. Bupivacaine was given for the block. Cold sensation was used to assess the height of block which was T8 at the end of 3 mins.

### Intra-Operative and Post-Operative

An emergency lower segment caesarean section performed to deliver a baby. Post spinal anaesthesia baby was delivered within 8 minutes. Baby cried immediately after birth, Inj. Pitocin 20 IU in 1000 ml of Ringer Lactate was started immediately after birth. Patient was haemodynamically stable throughout the procedure.

Blood loss- 600 ml

Urine output-150 ml

I.V Fluids- 3 pints R.L and 500 ml 6% HES

Post spinal level-T12 and receding

Patient was conscious, oriented and vitally stable.

### IV. Discussion

Swine flu is usually associated with respiratory system complications in the form of Pneumonia, ARDS, interstitial lung disease and respiratory failure. In spite of optimisation they have reactive upper airway hence choice of anaesthesia for such patients is a central neuraxial block most commonly spinal anaesthesia. There have been few case reports in which patients with swine flu presenting for caesarean section were successfully managed with spinal anaesthesia. Our patient was a case of swine flu posted for Lower segment caesarean section. The case was successfully managed with spinal anaesthesia after attaining an adequate level of T8 after co-loading with Ringer Lactate.

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