

Anterior Dislocation Of A Shoulder; An Unusual Complication Of Eclampsia: A Case Report And Review Of Literature Regarding Musculo-Skeletal Complications Of Eclampsia

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Abstract

This is a case report of anterior dislocation of the shoulder with fracture of the greater tuberosity as an unusual complication of eclampsia, unreported in literature so far. An attempt has been made to review the literature about musculoskeletal complication of eclampsia.

An emphasis is given on high index of suspicion and early clinical examination, which can lead to less suffering of patient, avoidance of unnecessary delay in treatment and decrease chances of potential recurrence of convulsions because of pain.

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CASE REPORT

A 42- years old lady who was 37 weeks pregnant, a known case of pre-eclampsia, was in the hospital's obstetrics ward for observation when she suddenly started fitting. She had an episode of sever seizures and was managed immediately as per hospital protocol for eclampsia and rushed to theatre for a crash caesarean section under general anaesthesia where a healthy baby was delivered.

She was gravida 1, para 1+0 (G1,P0+0).She did not have any significant past medical history including hypertension or epilepsy.

While recovering from general anaesthesia and sedation (back in ward), she started complaining of sever pain in her right shoulder and difficulty in moving right shoulder joint. On examination by Obstetrician right shoulder was found in attitude of abduction and externally rotated and shoulder range of motion were painful and limited especially

adduction and internal rotation. On call Orthopaedics team was contacted and they have confirmed the clinical diagnosis of anterior dislocation of right shoulder.

A portable x-ray was requested as patient could not go down for an x-ray in view of regular monitoring for any further convulsion. But getting xray was delayed for couple of hours because of their busy schedule.

Ultimately after having done the x-ray, a diagnosis of anterior dislocation of right shoulder with fracture of greater tuberosity was made. Now the obvious plan of treatment was close reduction and a sling application. But main worry was potential precipitation of convulsion during an attempted bed side manipulation under sedation and entonox, as discussed with obstetrician and anaesthetist.

So a joint design was made for taking patient back to theatre under general anaesthesia. The whole process was again delayed in view of busy operation theatre for some urgent operations. In the end a satisfactory close reduction under general anaesthesia and image intensifier was done almost 14 hours after finishing the caesarean section.

DISCUSSION

Dislocation of shoulder is a very rare complication of eclampsia and only one case has been reported so far in a Spanish article (1). But anterior dislocation as a complication of eclampsia is un-reported so far. Other reported musculo-skeletal complication of eclampsia include simultaneous bilateral central dislocation of hip (7), Parturition-induced pelvic dislocation in form of rupture symphysis pubis and disruption of sacro-iliac joints (3), multiple fractures including (bilateral central fracture dislocations of hips and undisplaced fracture of proximal humerus in same patient following seizures in a pregnant woman although later on it was found that seizures were due to grand-mal type of epilepsy (4).

Anterior dislocation of shoulder (unlike posterior dislocation) is also not a common complication of any other convulsive disorder like epilepsy, electro-convulsive therapy, electric shock. Although there are case reports about anterior dislocation of shoulder mainly bilateral has been reported as a consequence of convulsive crises (2, 5, 6) but not in particular to eclampsia.

Whatever may be the cause but high index of suspicion and quick early clinical examination of shoulders especially (the attitude and range of motion of shoulder) is key to early diagnosis and treatment of any such complication after any convulsive attack. This is particularly important with reference to eclampsia and also with regard to this case report. Because had this shoulder dislocation been diagnosed in theatre itself before reversal from general anaesthesia, it could have been easily screened under image intensifier by Orthopaedic team and quickly dealt with appropriately. So prolong suffering by patient and potential risk of recurrence of convulsion post-operatively because of pain as a result of (persistent dislocation itself and manipulation of shoulder

without general anaesthesia) and re-exposure to general anaesthesia can be avoided.

CONCLUSION

Anterior dislocation of shoulder is a very rare complication of any type of seizure disorder and unreported so far as a complication of eclampsia. A high index of suspicion and a quick clinical examination of shoulder joints before reversal from anaesthesia can avoid prolong patient suffering, unnecessary delay in treatment, and avoid a potential recurrence of convulsion because of pain (either due to persistence of dislocation or manipulation and attempted reduction of dislocation without proper anaesthesia).

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