

## Eclampsia With Retropharyngeal Edema : A Rare Presentation

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### Case report

A twenty year old un-booked primigravida with fetal gestational age of 37 weeks, was referred to our hospital with six episodes of eclamptic fits since early morning. On examination the patient was disoriented and restless, had raised blood pressure (150/110 mm Hg), generalized edema, retinopathy (grade II) and heavy albuminuria. She had one more fit after admission. Laboratory investigations revealed: Hb-12gm/dl. Liver function tests, renal function tests, platelet count and prothrombin time were within normal limits. She was treated with standard magnesium sulphate doses besides other supportive measures. Once fits were controlled, cesaerean section under general anesthesia was undertaken at 1230 hrs in view of non-favorable cervical dilatation and effacement of cervix. Intubation carried out for administration of general anaesthesia was not difficult despite presence of some laryngeal edema. A live baby, weighing 2.7 kg with good Apgar score was delivered. Intra and immediate post-operative period was uneventful. At about 1630 hours the same day she developed fever (102°F). A soft non-tender swelling in the neck region, which was observed on admission, was seen increasing in size and extending bilaterally to the parotid, sub-mandibular and submental regions. By 1900 hrs, patient was very restless and had developed respiratory discomfort.



Figure 1: Diffuse soft tissue swelling of the neck

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Ultrasonography of the neck showed features suggestive of retropharyngeal and retro-tracheal cellulites and edema. X-Ray neck showed widened retropharyngeal and retro-tracheal space. While patient was being investigated she developed breathlessness and strider which worsened on applying probe on trachea suggesting tracheal compression. There was a strong suspicion of retropharyngeal abscess and drainage of suspected abscess under General Anaesthesia. was undertaken at 2130 hrs. A wide bore needle aspiration of retropharyngeal space by intraoral route did not yield any pus or blood but only a small amount of clear edema fluid was obtained. In view of respiratory compromise, patient was subject to intensive care. Endotracheal tube was removed the next day morning. She was administered broad spectrum antibiotics and Inj. hydrocortisone. She subsequently had an uneventful recovery. Both mother and baby were discharged on seventh post-operation day.

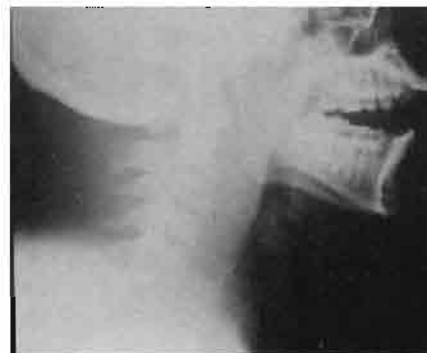


Figure 2 : X-ray neck on first day

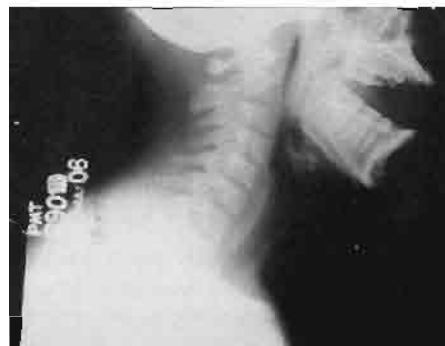


Figure 3: X-ray neck before discharge

## Discussion

Retropharyngeal space is limited above by the base of the skull, while below, it extends behind the esophagus into the posterior mediastinal cavity of the thorax. Above the hyoid bone it is in continuity with the para-pharyngeal space. It contains the retropharyngeal lymph nodes superiorly and fatty tissue elsewhere[2]. Being a closed space it can cause pressure symptoms in case of collection or infection. Retropharyngeal abscess is a common occurrence in children. Besides infection, swelling of this space can also occur because of congenital conditions e.g. brachial cyst, ectopic thyroid, neoplasms like cystic hygroma, neuroblastoma, traumatic conditions like hematoma, foreign bodies and hypothyroidism. Tuberculosis of the vertebral bodies can also cause abscess formation in this space. Laryngeal edema is a common finding during intubation in cases of PET with severe edema but respiratory embarrassment is uncommon. Post-operative neck swelling can also be caused by injury to the trachea during difficult intubation[4,5]. In this case, however, USG and X-ray of the neck ruled out any surgical emphysema. Retropharyngeal space measuring greater than 7 mm and retrotracheal space greater than 22 mm in adults are abnormal and suggestive of a pathological process[6,7]. In this case measurements were 28 and 24mm respectively. The swelling subsided and measurements became normal within 48 hrs. This is probably the first reported case of this kind where edema due to pre-eclampsia caused intense pressure effects. Symptoms and signs, especially high temperature, increasing neck swelling, respiratory discomfort and development of stridor, X-ray and USG findings mimicked emergency condition like retropharyngeal abscess. There was little

option but to subject the patient to drainage procedure of supposed abscess, a life-threatening emergency, with potential for airway compromise and other catastrophic complications[8]. She had to be maintained on endotracheal intubation for fear of further respiratory compromise till she recovered completely and the swelling subsided.

## References

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