

An unusual cause of Chronic Subdural Hematoma- Idiopathic Thrombocytopenia Purpura

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Abstract: Subdural Hematoma in Idiopathic Thrombocytopenia is rare compare to subarachnoid or Intracerebral bleed. We present the case which acute SDH which was life threatening and operated with good clinical outcome.

Keywords: Subdural Hematoma, ITP.

INTRODUCTION

Immune thrombocytopenic purpura (ITP; also termed idiopathic thrombocytopenic purpura) is an acquired disorder in which there is immune-mediated destruction of platelets and possibly inhibition of platelet release from the megakaryocyte[1].

Chronic subdural hematoma is unusual in Idiopathic Thrombocytopenia Purpura and only cases have been reported[2,3].

CASE REPORT

60years old man, a casual labourer admitted with acute onset headache and altered level of consciousness one day. No previous history of any bleeding manifestations, bleeding gums, purpuric spots, haematuria, etc. H/o road traffic accident with head injury 2 yrs back which didn't require hospitalisation. H/O chest injury 15 yrs back. On examination there is no purpuric spots, subconjunctival haemorrhage. Neurological Examination revealed his Glasgow Coma Scale of E4 V4 M5. Pupils- equal and reacting to light, moves all 4 limbs

Respiratory system examinations decreased breathsound right lower hemithorax and other systems exams were within normal limits.

He was rushed for CT scan brain (Fig : 3) which showed Right FrontoTemporo Parietal Acute on Chronic Subdural Hematoma with mass effect. He was planned for Burrhole Tapping of Subdural Hematoma on right side.

His Biochemical investigations revealed a platelet count of 8000cells/cumm³ with slightly elevated

renal parameters rest of investigations are normal including coagulation panel except platelet count.

His chest x-ray (Fig: 1) showed a haziness over right middle and lower lobe. CT chest was done which showed a mass lesion in right middle lobe (Fig : 2). Biopsy was planned to rule out Carcinoma lung as carcinoma lung can present with Idiopathic Thrombocytopenia and there are only 11 cases reported so far.

A peripheral smear study was done which showed severe thrombocytopenia with giant platelets quite characteristic of Idiopathic Thrombocytopenia.

In view of the seriousness of the disease process , it was decided to tranfuse platelets and decided to do surgery after improving platelets to an acceptable level of 10,000/mm³ Eight units of platelet concentrate transfusion was planned.

The patient was started on Inj. Methyl Prednisolone 1gm IV OD and eight units of platelet concentrate was transfused overnight. Next day the platelet count was repeated which again showed a count of 8000cells/cumm³.

Since the GCS deteriorated , Considering the graveness of the situation, patient attenders were explained about the risks involved in the procedure and an emergency burrhole tapping was done. The procedure was uneventful and the patient recovered well from anaesthesia & was electively ventilated for one day. The next day, patient was extubated. He was conscious, oriented with a GCS of 15/15. His platelet count was 6900cells/mm³, but did not have any major

bleeding diathesis but for a mild subconjunctival hemorrhage.

He was continued on steroids and an USG guided biopsy of the lung mass was planned and done and sent for Histopathological Examination.

He was continued on steroids, and was discharged 5 days post-operatively, when his platelet count raised to 28,500cells/mm³. He was switched to oral steroids before discharge.

Follow- up

His lung biopsy revealed that it was only a organised hematoma. He had a history of chest injury which explained the chest mass. His post operative CT scan was normal after the removal of the hematoma (Fig 4).

He was continued on oral steroids and 30 days post discharge his platelet count was 2,06,000cells/cumm, He had returned back to his work and is now on regular follow-up.



Fig-1: X-Ray Chest showing haziness over right middle and lower lobe

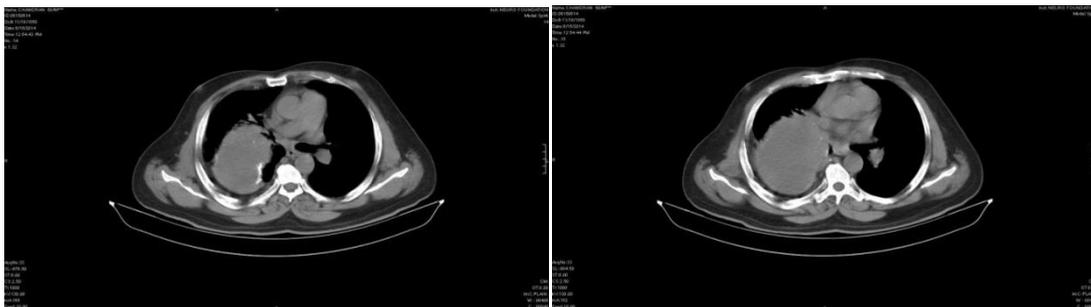


Fig-2: CT Chest showing a mass in the right middle lobe

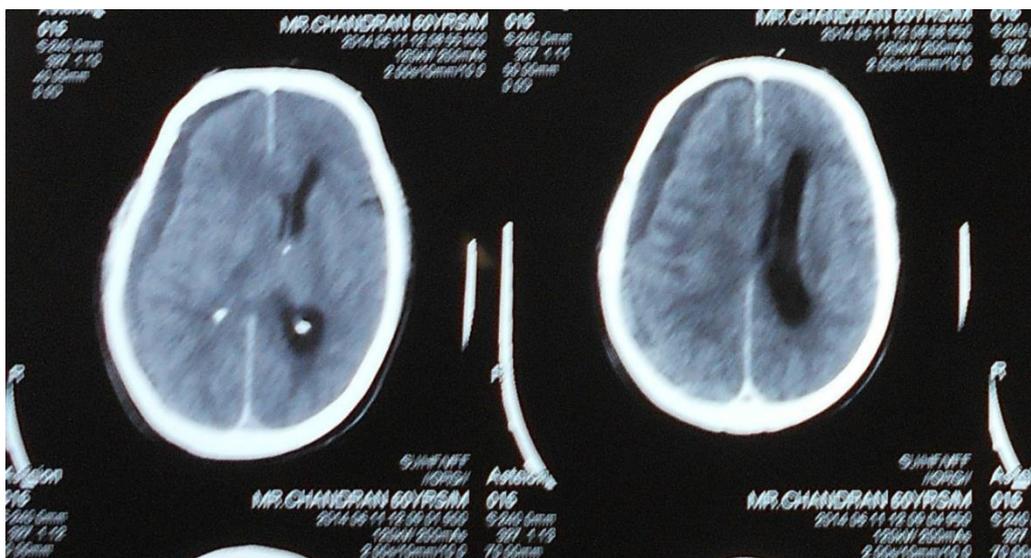


Fig-3: Pre operative CT Scan brain showing Right FrontoTemporo Parietal Acute on Chronic Subdural Hematoma with mass effect

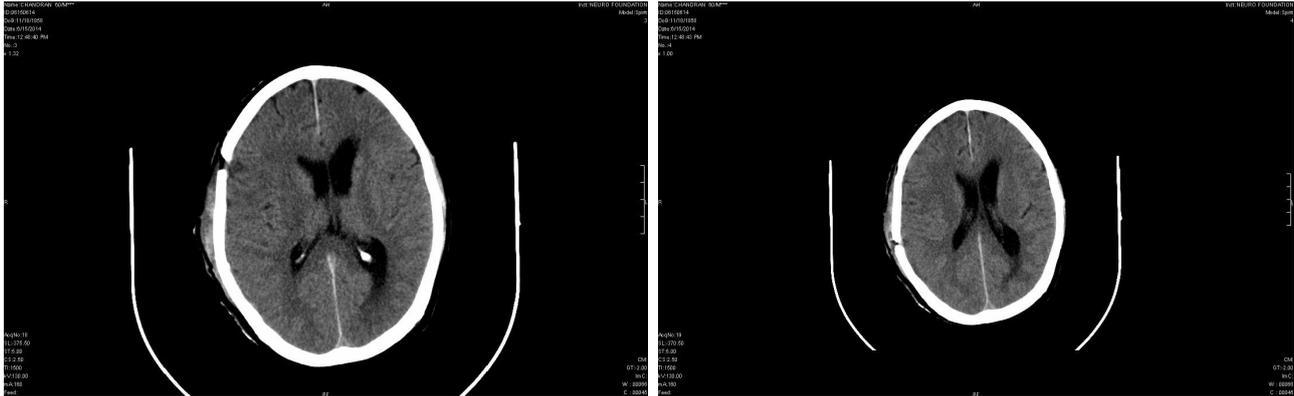


Fig-4 : Post Operative CT Brain showing the hematoma was removed



Fig-5: Post operative Picture of the patient showing Subconjunctival Hemorrhage



Fig-6 : Patient's subconjunctival hemorrhage had resolved after 1 month of Follow Up

In our case the patient was complaining of severe headache, and altered conscious level, gross mass effect radiologically, requiring emergency evacuation of haematoma to prevent sudden deterioration due to herniation. So operative intervention was planned after raising the platelet to atleast $10,000/\text{mm}^3$. But as the Patients' relatives were willing to take the high risk associated with intra and post-operative bleeding, hence the patients were managed surgically.

The patient didn't have significant intra operative or post operative bleeding except for the subconjunctival haemorrhage (Fig 5) and he recovered neurologically well following surgery and were later discharged within a week's time. The subconjunctival haemorrhage was also resolved when the patient came for follow-up after 1 month (Fig 6). There are case reports of chronic SDH with ITP being managed conservatively which requires prolonged hospitalisation for months for spontaneous resolution of the hematoma while there is always a risk of herniation[4].

IV anti-(Rh)D, also known as IV Rh immune globulin (IG), was not recommended by the 1996 American Society of Hematology practice guidelines as it didn't show a distinct advantage over using i.v steroids. However, recent studies using higher dosages of IV RhIG in acute ITP in children and adults show platelet count increases at 24 hours faster than medicating with steroids. Although generally less toxic than IV steroids, IV RhIG is more expensive than IV steroids[5]. In our scenario the patients belonged to a lower income group who were not able to afford intravenous immunoglobulins and hence it was not used.

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DISCUSSION

In view of the rarity of the condition no definite guidelines exist, as to the management of chronic subdural haematomas associated with idiopathic thrombocytopenic purpura. The site, size, the presence of midline shift on CT scan as well as the patient's neurological status decide the management protocols

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