

**HAEMORRHAGE INTRACEREBRAL SPONTAN
SETELAH HEMODIALISIS**

***SPONTANEOUS INTRACEREBRAL HAEMORRHAGE
AFTER HAEMODIALYSIS***

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ABSTRACT

Haemodialysis (HD) is one of therapy for patient with chronic renal failure. During HD, patient will be given heparin in certain dose to prevent blood clotting. The using of heparin will increase the risk of intracranial bleeding, although it rarely occur. A 60 year old man suddenly got tonic clonic seizure for about 30 seconds right after he finished his routine HD. It was his first seizure. During the seizure, the patient lost his consciousness but the patient regain his consciousness after the seizure stopped. After the seizure, he has an anterograde amnesia.

Keyword: *Haemodialysis*

INTRODUCTION

Haemodialysis (HD) is one of therapy for patient with chronic renal failure. During HD, patient will be given heparin in certain dose to prevent blood clotting. The using of heparin will increase the risk of intracranial bleeding, although it rarely occur.

CASE REPORT

A 60 year old man suddenly got tonic clonic seizure for about 30 seconds right after he finished his routine HD. It was his first seizure. During the seizure, the patient lost his consciousness but the patient regain his consciousness after the seizure stopped. After the seizure, he has an anterograde amnesia.

During the HD, the patient didn't complain anything. The vital sign was also stable with the blood pressure range between

120-140 / 70-90 mmHg. The physical examination during the HD was also normal. The HD was running for 5 hours. The number of heparin that had been used was 4.000 IU.

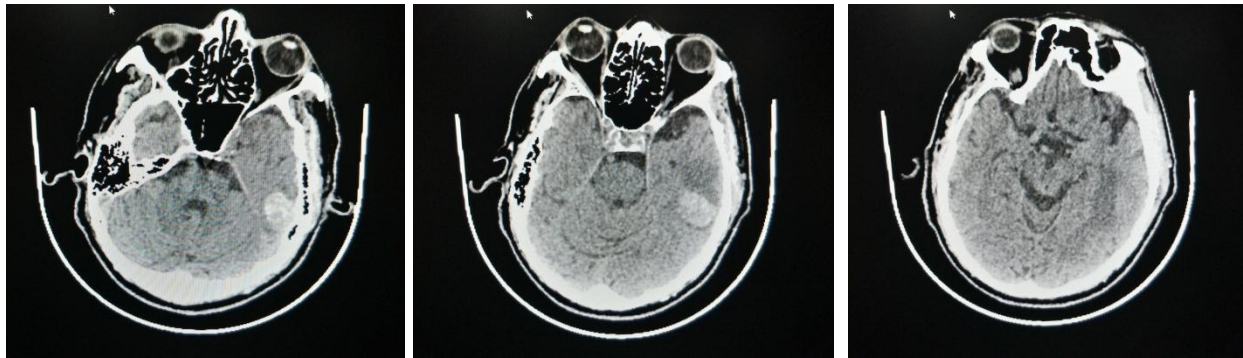
When the seizure occurred, he was treated with protecting his ABC. After we put oropharyngeal airway, the patient suddenly regain his consciousness but still had anterograde amnesia. Then we put oxygen via nasal canule and put an IV line. We also checked his blood glucose level and it was still normal (181 mg/dL). After that, we brought the patient to emergency room for further examination.

In emergency room, the patient became alert. There was neither neurologic deficit nor sign of lateralization. The muscle strength was normal in all extremities. The other physical examination was also normal. The ECG revealed

a sinus tachycardia without sign of STEMI. Then, we checked some blood chemistry and did a non contrast brain CT-scan.

The patient's blood examination result was also in the normal range, except the ureum

(73) and the creatine level (7,6). The electrolyte level was in the normal range (Sodium = 143, Potassium = 4 Calsium = 10,1 and Chlorida = 100). The CT-scan revealed an acute ICH and the size was 5 x 4,3 x 4 cm (the picture below).



The patient then was brought to the ward and treated with phenytoin 2 x 100mg orally. After that, the seizure never occurred and the patient was planned to be discharged.

The patient is a HD routine patient since October 2017 because of his chronic renal failure. Beside chronic renal failure, he also has a coronary artery disease and consume some medication daily include aspirin 1 x 80mg (being stopped after the CT-scan reveal an ICH). He never complains about any symptoms related to his medication like epigastric pain, bloody stool, etc.

DISCUSSION

Seizure is a complication associated with haemodialysis. In the past, it's often caused by disequilibrium syndrome, but it rarely happens today with newer haemodialysis technique. (3,4) Chronic renal failure is associated with high

incidence of stroke, especially ICH in patient with hemodialysis.(1) Chronic renal failure patient also have a higher risk for cerebral microbleeds and could become an ICH, even it's only 0,7%.(2) Our patient suddenly got tonic clonic seizure right after the HD was finished. After being evaluated by non-contrast brain CT-scan, it showed an acute intracerebral haemorrhage. The electrolyte level was in the normal range.

Phenytoin is the most often used drug and is effective in both tonic clonic and partial seizure. Our patient was treated with phenytoin and he had no more seizure. The haemodialysis was still continued as his routine schedule (4 days after the intracerebral haemorrhage) but with minimal heparin (2.500 units).

After being hospitalized for one week, the patient was discharged. During the hospitalization, the patient vital sign was always

in normal range (including his blood pressure). He had no complain at all, no neurological deficit and we found no lateralization.

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