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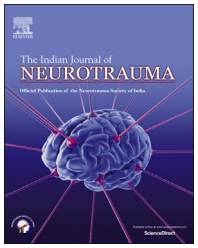

Letter to the Editor

Rare case of spontaneous acute subdural haematoma due to antiplatelet therapy and its management

Sir,

Use of antiplatelet drugs like aspirin, clopidogrel has been on the constant rise due to increase in the incidence of ischaemic stroke, cardiac conditions etc. Antiplatelet drugs have been well known to cause chronic haematoma inside cranial cavity triggered by trivial trauma. However, their association with acute subdural haematoma is quite peculiar and very rarely have been reported in the literature.[1] We report here such a unique case, where no definite history of trauma could be elicited.

A 65 year old male known hypertensive patient was presented with dizziness and headache for last 15 days. Headache was of low intensity and intermittent in nature. There was no vomiting, loss of consciousness, seizure, limb paralysis etc. The patient had coronary artery disease and had undergone cardiac angioplasty with stenting 12 years back. He was on clopidogrel and aspirin 75 mg daily for the same period. Plain CT scan of the head showed a thin crescent shaped hyperdense lesion in right side hemisphere suggestive of acute subdural haematoma with minimal midline shift and no mass effect (Fig. 1A). He was managed conservatively with stoppage of both ecosprin and clopidogrel and adding lasilactone. Blood coagulation parameters were normal with INR being 1.07. CT scan after 15 days showed the lesion to be of same size with slight decrease in hyperdensity suggesting the lesion to become a subacute haematoma (Fig. 1B). There was slight relief in dizziness and headache. Same conservative treatment was continued. Nearly 30 days after the first incident, he presented to us with left side hemiparesis (MRCS scale grade 3) with gross increase in headache and intermittent vomiting. CT scan showed the previous lesion turning into iso-to hypodense in character with increase in size and producing gross midline shift and mass effect (Fig. 1C). The chronic subdural haematoma was drained using right side fronto-parietal double burr hole. The patient improved clinically (Fig. 2) and was discharged after 5 days with only aspirin started at 75 mg once daily, 5 days per week. At 6 months postoperative, the patient is asymptomatic with no thrombotic complications.

Antiplatelet drugs like clopidogrel and aspirin are commonly used to improve the circulation particularly in patients with history of or having risk factors for developing ischaemic conditions like stroke, myocardial ischaemia by altering the chemical properties of blood and reducing its coagulation. Use of these drugs are on constant rise due to the increase in prevalence of these ischaemic diseases as a result of rapid modernisation and change in lifestyles like obesity, smoking leading to hypertension and diabetes, two most common entities causing stroke and coronary artery disease. Both aspirin and clopidogrel prevent platelet aggregation. They have been commonly implicated for increasing the risk for development of chronic subdural haematoma in elderly patients after trivial trauma,[2] the same group are also at high risk for stroke and coronary artery disease. The intracranial haematomas associated with antiplatelet and anti-thrombotic medications are associated with more incidences of trivial trauma, delayed presentation and better Glasgow coma scale at the time of admission.[1] The threshold for doing a CT scan in patients receiving these increased bleeding tendency drugs should be low even after a trivial trauma. Rupture of a small artery traversing the subdural space and impaired coagulation due to anti-platelet therapy can lead to such acute subdural haematoma. Rupture of the artery in absence of trauma could be due to atherosclerotic fragility of vessels and unsupported vessels which have to traverse a longer distance due to cerebral atrophy in elderly patients. The use of two antiplatelets in same patient is associated with increased incidence of intracranial haematoma in comparison to single antiplatelet.[3] We recommend only one antiplatelet to our patient at a low dose (75 mg) 5 days per week so as to have a good balance between thrombotic and haemorrhagic complications with regular monitoring of coagulation parameters.

Our case was exclusive in that it is the first case in literature to have spontaneous acute subdural haematoma in the setting of antiplatelet drug intake. There was no history of trauma which strengthens the role of these antiplatelet drugs in causation of acute haematoma. These types of patients

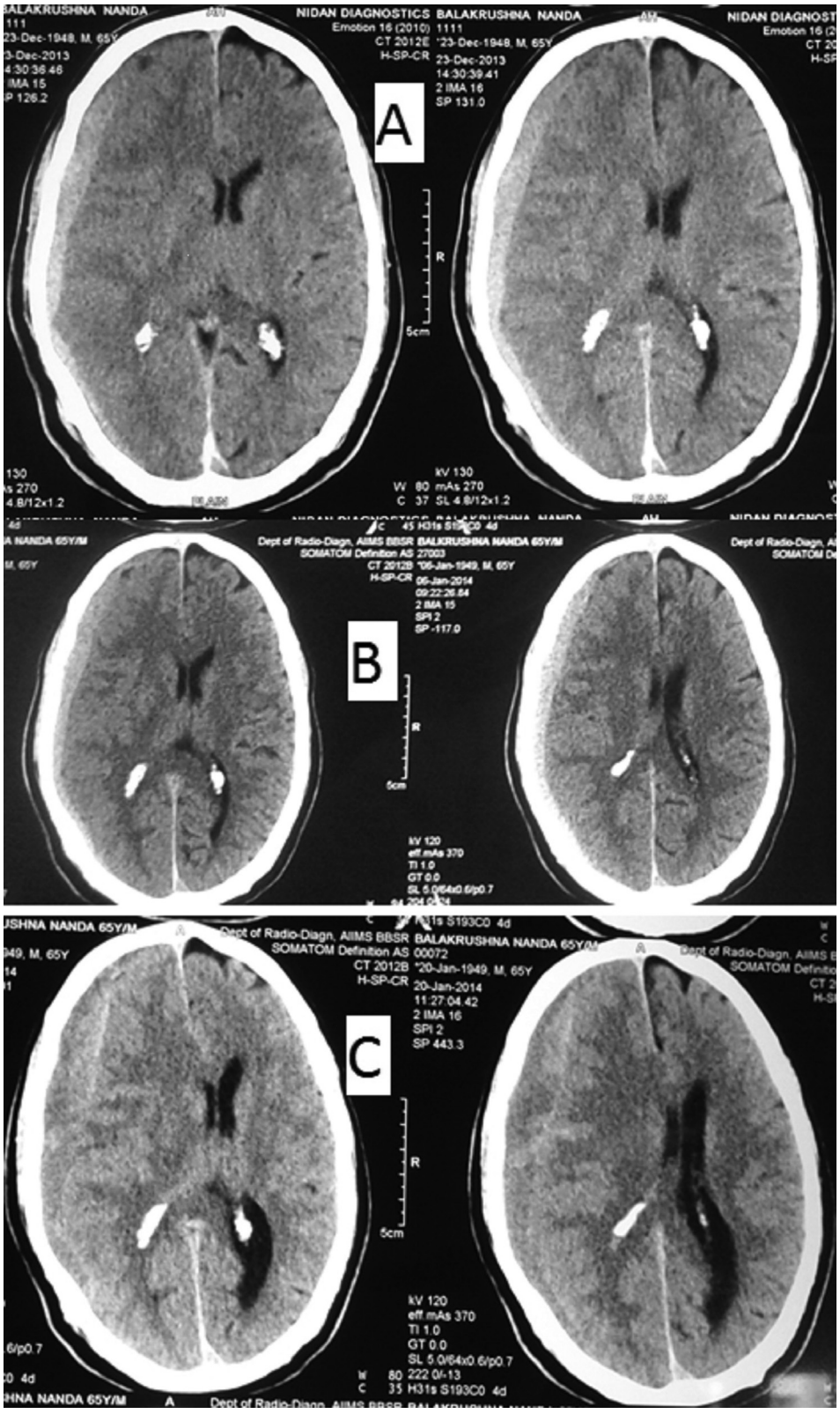

Fig. 1 – A- Initial CT scan demonstrating a thin acute SDH with minimal midline shift. B – CT scan after 15 days with reduction in hyperdensity. C – Isodense to hypodense collection with gross midline shift and mass effect.

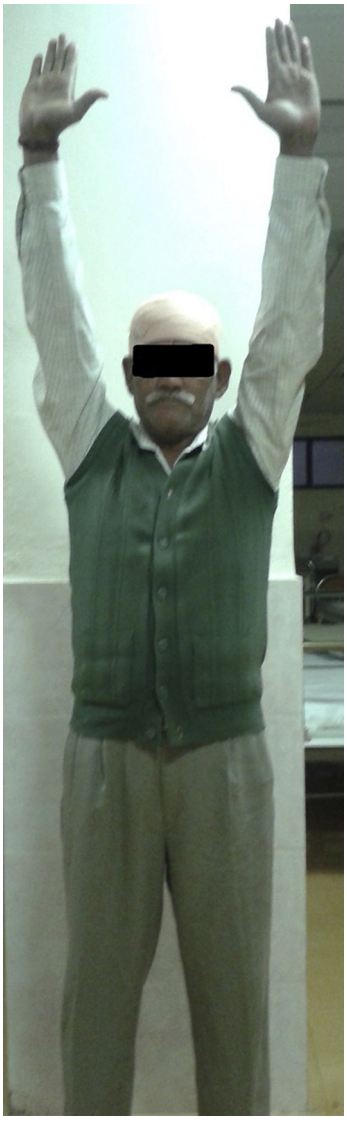

Fig. 2 – Improvement in left side hemiparesis post-operatively.

should be managed by clinic-radiological profile and we recommend using low dose single antiplatelet drugs to reduce the chances of future occurrence of such life threatening conditions.

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