

A RARE CASE OF DELAYED TRAUMATIC INTRACRANIAL HAEMORRHAGE IN ELDERLY

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INTRODUCTION

The incidence of delayed blunt traumatic intracranial haemorrhage (ICH) in elderly is low based on a prospective observational study conducted in 2018 by *Chenoweth, J. A. et al.* One of the identified risk factors to developing ICH in elderly include the usage of oral antiplatelet and anticoagulant. We present an interesting case of an elderly who presented to Emergency Department (ED) with ICH following a normal CT scan finding 3 weeks prior.

CASE DESCRIPTION

A 78-year-old male with underlying diabetes mellitus, hypertension, not on any oral antiplatelet or anticoagulants. He fell down after trying to climb up a chair to clean the fan and hit his head on the ground. Post trauma, he complained of dizziness. There were no other symptoms of raised intracranial pressure. Systemic and neurological examinations were unremarkable. A CT scan was done and showed no acute intracranial bleed. He was discharged home with head injury advice. 3 weeks later, he revisited the ED due to worsening headache. During this visit, there were no abnormal neurological findings seen. A repeated CT scan was performed showed bilateral fronto-parieto-temporal acute to subacute subdural hemorrhages (SDH) with cerebral edema and mass effect. He was then referred to the neurosurgical team for further surgical intervention and transferred to a tertiary center.

DISCUSSION

Elderly patients on anticoagulant and antiplatelet have a higher risk of sustaining intracranial hemorrhage following trauma. Interestingly, our patient did not consume these medications. To explain this condition, anatomical and structural brain changes in the elderly could cause them to easily get ICH following a fall. This is because elderly patients have cerebral atrophy which increases the space between the dura and skull for bleeding. They also have a decline in the elasticity of the cerebral bridging veins, which pose a higher risk of injury and developing ICH.

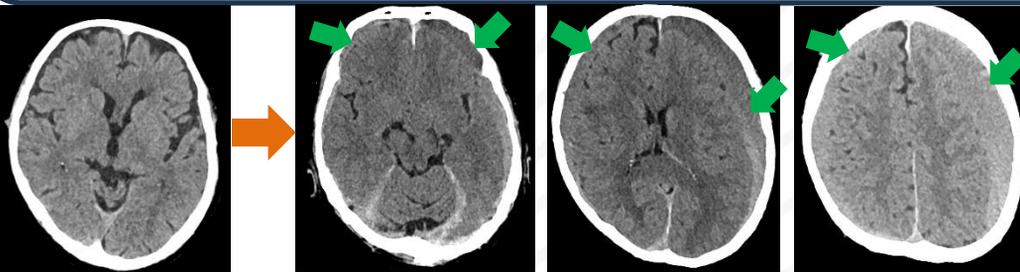


Figure 1

Figure 2

Figure 3

Figure 4

Fig. 1 : CT brain image at 1st visit shows no ICH.

Fig. 2, Fig. 3, Fig. 4 : CT brain images at 2nd visit shows bilateral SDH (green arrow) with cerebral edema and mass effect.

CONCLUSION

Although delayed ICH in the elderly is rare, clinicians must be vigilant when dealing with elderly patients who revisit the ED with any symptoms of raised intracranial pressure following trauma. A repeat CT scan must be performed despite normal CT finding during previous medical consult.

Reference :

1. Chenoweth, J. A., et al (2018). Incidence of Delayed Intracranial Hemorrhage in Older Patients After Blunt Head Trauma. *JAMA surgery*, 153(6), 570–575.
2. Shih, R. D., et al (2024). Low Incidence of Delayed Intracranial Hemorrhage in Geriatric Emergency Department Patients on Preinjury Anticoagulation Presenting with Blunt Head Trauma. *The Journal of emergency medicine*, 67(6), 522.