SEEING IS BELIEVING: VISION IMPAIRMENT AFTER SUBARACHNOID HAEMORRHAGE MAY BE REVERSIBLE – A CASE REPORT OF DELAYED DIAGNOSIS AND TREATMENT OF TERSON'S SYNDROME

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Background and aim

Our aim is to review the presentation, identification and treatment of a poorly recognised, reversible cause of blindness in the rehabilitation setting. At ABI Rehabilitation, we know of only five clients admitted with Terson's syndrome in the last five years; three of which were not diagnosed until they were admitted to rehabilitation.

Vitreous haemorrhage (VH) associated with subarachnoid haemorrhage (SAH) is known as Terson's syndrome. Previously thought to be a rare complication of SAH, recent studies suggest incidence as high as 40-50% [2, 3, 4] The exact mechanism remains unclear. The leading hypothesis is that bleeding in the eye occurs from sudden elevation of pressure within the retinal venous system due to rapid increase in intracranial pressure (ICP). Terson's syndrome is the most serious form of intraocular haemorrhage associated with SAH and usually results in blindness.

Case Report

49 yr old male, working full-time and driving. Smoker. Called ambulance due to headaches and visual changes. Diagnosed with SAH due to anterior communicating artery (ACoA) aneurysm.

1. Early course

- Acute hospital admission: cognitive deficits, "cortical blindness", "challenging behaviours", disorientation, visual hallucinations.
- Admission to ABI Rehabilitation was 6 weeks after aneurysm rupture

2. Assessment

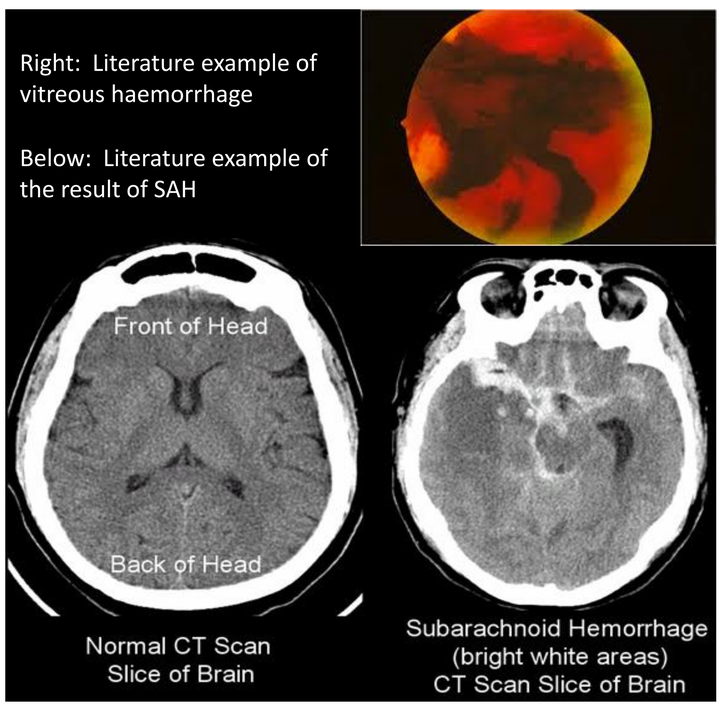
- Central vision loss, unable to see person when standing directly in front – right peripheral vision unreliable - inaccurately describing person, accurate description within left peripheral vision.
- Pupils responsive to light, fundoscopic exam revealed dense black vitreous, unable to see retina.
- Supervision mobilising indoors/outdoors, set-up assistance for feeding and for showering.

3. Interventions

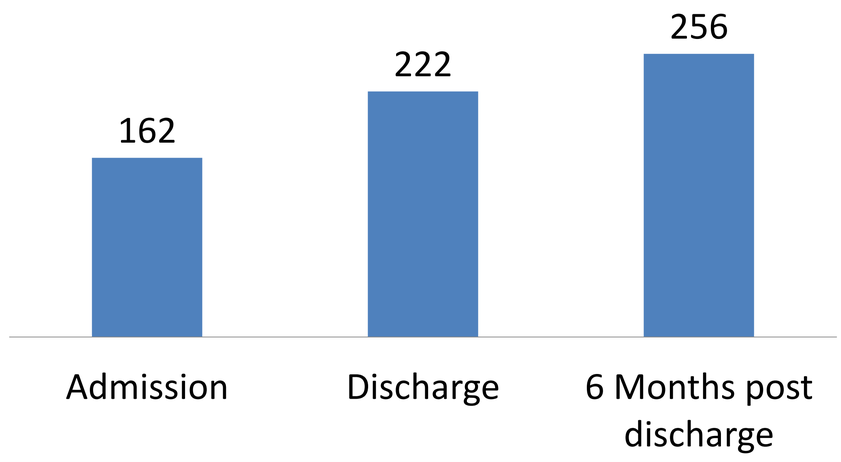
- Emotional support for client and partner for distress due to vision loss
- Referral to Blind Foundation, compensatory visual strategies trialled
- Urgent referral to Ophthalmology; urgent surgery scheduled once diagnosis confirmed.
- Discharge home -no attendant care needs, Vocational referral. Blind Foundation no longer required.

4. Six-months follow-up

- Received visual clearance to return to driving – private and commercial licenses.
- Working full-time.
- Client reports high level of function and life satisfaction.



FIM-FAM-DOM scores



Discussion

Terson's syndrome:

- A reversible cause of blindness in SAH.
- More common than previously believed.
- Remains under-recognised.
- May be mistaken for cortical blindness.
- Overall remains a predictor of poor prognosis.

For the rehabilitation professional:

- Increased awareness of this syndrome may lead to earlier identification and restoration of sight.
- This case supports the need for fundoscopic examinations for patients with visual impairment following SAH or traumatic brain injury (TBI).
- Support early surgery to enhance rehabilitation outcomes and length of stay.

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