Eye tracking:the next phenomenon in subarachnoid hemorrhaging management

Health & Medicine



Eye Tracking: Managing Subarachnoid Hemorrhaging Eye Tracking:

Managing Subarachnoid Hemorrhaging Subarachnoid Hemorrhaging This is described as a condition where blood is extravagated into subarachnoid gap between arachnoid and pial membrane. With respect to clinical perspective, head trauma is the mostly occurred disorder (Bederson & AANS Publications Committee, 1997, p. 67). On the other hand SAH has been used to describe spontaneous hemorrhage resulting from ruptured cerebral aneurysm as well as arteriovenous malformation.

Anatomy

Anatomy entails the scientific study of human parts and their structure. With respect to SAF, arterioles, cerebellum forms centerpieces of study.

Pathogenesis

A particular disease pathogenesis illustrates its causative agents, origin and developments with respect to whether it is chronic, recurrent or acute. SAH is attached to familial strong history of inheritable connective tissue disorders and abuse of sympathomimetic substances.

Clinical syndromes

This refers to a constellation of laboratory and physical outcomes attached as the primary subarachnoid Hemorrhaging developmental process such as headache trauma.

Population group

Persons with inheritable intracranial aneurysms attached-connective tissue disorders like autosomal dominant (neurofibromatosis type 1, Marfan syndrome, Ehlers-Danlos disease type IV, polycystic) and strong background of intracranial aneurysms are SAH attached.

Predisposition factors

Familial predisposition with respect to first degree relatives of SAH patients based in inheritable connective tissue disorders harbors intracranial aneurysm. Besides, sympathomimetic agents have also predisposed intracranial hemorrhage based on medication history (Bederson & AANS Publications Committee, 1997, p. 87). Alcohol, tobacco and cocaine escalate blood pressure resulting intracranial hemorrhage. SAH has also been associated to sexual intercourses is it is attached to a surge in arteriole blood pressure.

Diagnose

SAH's diagnosis entails a high index of clinical suspect alongside radiologic justification through immediate non-contrast CT proceeded by brain CT angiography or lumbar puncture. Imaging is extended upon establishment of diagnosis to unearth SAH's source.

Management

Management in this context entails curative, promotive, and preventive actions aimed at keeping in control, the effects and contraction of SAF so as to reduce its effects. Such processes as screening and diagnosis take focal points.

Prognosis

This entails the study of probability of a disease occurrence with respect to risks attached to a particular ailment. With respect to SAF, its likelihood would be so high to those having familial attachments on inheritable connective tissue disorders, smokers, hypertensions patients and binge drinkers.

Epidemiology of subarachnoid Hemorrhaging

Autopsy reveals that over 5 % of population has un-ruptured aneurysm with 30000 episodes felt annually in United States. In U. S, SAH accounts for between 0. 06 and 0. 16 for every 1000 persons yearly. Riskiness of SAH escalates with age; 50 years rated as the mean incidence. SAH is prevalent in female than male individuals rated at 3: 2.

Incidence of general headache

A phenomenon referred to as "the worst headache of my life" (sudden headache) is associated with SAH patients and this calls for immediate stabilization and hospitalization of its patients.

Incidence of missed diagnosis

About 20-25 percent of diagnosis performed cerebral angiograms to justify bleeding source flowing SAH have shown negative results. The long-term prognosis is important with respect to aneurismal SAH in regard to patients that lacked aetiology.

Associated risks, commodities and neurologic outcome

Smoking, binge drinking of alcohol, hypertensions, inheritable disorders of connective tissue and familial predisposition have a multiplier effect on the magnitude of SAH. Cerebral angiogram screening poses threats to asymptomatic patients and thus should be researched further to established appealing screening procedures (Weir, 1998, p. 56). Sympathomimetic agents have acted as pressor agents leading escalated intracranial hemorrhage. Neurologic outcomes such as cerebral vasospasm, hydrocephalus development, and re-bleeding have been noted.

Mortality

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Untreated SAH is attached to high rate of early mortality of 50% following one month of initial bleedings. It is attached to high mortality and morbidity and it is noted that over 10% of patient die en route to hospitals.

History and Evolution of studies/tests for diagnosis and disease

Screening has been presented as the based approach in determining intracranial aneurysms based on cerebral angiography (Hütter, 2000, p. 76).

Magnetic Resonance (MR) as well as CT angiography presents a promising platform for quality imaging attached to high rate of intracranial aneurysms detections leading to minimal probability of missed incidences. Studies have also recommended proactive prevented mechanisms as reduced alcohol, tobacco,

Normal population Vs population with preexisting facilitating conditions Smoking, binge drinking of alcohol, hypertensions, inheritable disorders of connective tissue and familial predisposition have a multiplier effect on the magnitude of SAH. Abuse of methamphetamine and cocaine (sympathomimetic) escalates SAH.

Current management and improvement

Hyperventilation and Intubation is essential for escalating ICP-featured patients as well as osmotic agents (manitol), Loop diuretics (furosemide), IV steroids. Besides, calcium channel blockers and hydralazine have also been used. Angiotensin-converting enzyme inhibitors is also applicable but not for first-line agents with respect to acute SAH.

When mean arterial pressure rises above 130mm Hg, Antihypertensive agents such as IV beta blockers are used. ICP-elevation-attached nitrates are also weeded out for such patients (Hütter, 2000, p. 123). Intensive research

should be undertaken on screening with respect to asymptomatic patients pegged at cerebral angiography characterized by invasive and risk-prone procedure that is still morbidity and little mortality attached.

Reference

Bederson, J. B., & AANS Publications Committee. (1997). Subarachnoid hemorrhage: Pathophysiology and management. Park Ridge, III: American Association of Neurological Surgeons.

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