Abstract

Anaesthetic problems encountered in a case of progeria include difficult airway and myocardial infarction. Prior IDL to rule out any airway abnormality and cardiac work up to rule out myocardial infarction helps one be better prepared. Anticipation of difficult airway and managing the patient like geriatric age group is a key to management of such patients.

ISNACC-S-46

Anaesthetic management of a known case of Werner syndrome for excision of left frontal meningioma

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Introduction: Progeria or premature ageing is a rare congenital abnormality in children, with a higher risk of complications during sedation or anaesthesia, due to their challenging airway anatomy and the potential for cardiovascular events. We report the successful anaesthetic management using general anaesthesia of a known case of Werner syndrome. Case Summary: A 34 year old, 37 kg, male presented with a history of numbness and tingling sensations in right upper and lower limb with blurred vision. Investigations revealed a meningioma in the left frontal region and patient was posted for craniotomy for tumor excision. Progeria was diagnosed during the preoperative work-up based on physical appearance and history of diabetes mellitus, hypertension, hypothyroidism, chronic kidney disease and early onset bilateral cataract. His GCS was 15 and vital parameters were normal. Airway assessment was normal. Routine investigation showed FBS: 210 mg/dl, creatinine: 2.7 mg/dl and potassium: 4.5 mEq/L. ECG showed ST segment elevation in V1 - V6 and LVH, baseline echo showed EF = 55% with global hypokinesia. Anticipating a difficult airway, difficult airway trolley was kept ready in OR. Preoxygenation preceded invasive monitoring. Standard intravenous induction with etomidate 0.3 mg/kg, and after confirming adequate mask ventilation, Atracurium 0.5 mg/kg was given and patient was intubated. Anesthesia was maintained with oxygen: Air-50%, sevoflurane (MAC 0.5-0.6) and atracurium infusion. The patient was reversed, extubated and shifted to ICU. Procedure was uneventful.

Conclusion: Anticipation of difficult airway and managing the patient like geriatric age group helps one be better prepared. Anticipation of difficult airway and managing the patient like geriatric age group is a key to management of such patients.

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A prospective randomized single blind study of a comparison between total intravenous anaesthesia with propofol and conventional sevoflurane (inhaled) anaesthesia for their effect on the brain bulk during elective craniotomy for supratentorial tumor

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Introduction: Inhalational agents cause a dose dependent cerebral vasodilation and increase intracranial pressure (ICP). Total intravenous anaesthesia (TIVA) has no cerebral vasodilatory effect, A combination technique of inhalational and intravenous anaesthesia combines the advantage of both. We conducted a study to compare brain relaxation in three groups: TIVA, inhalational and IV+ (IV plus inhalational). Methods: Following institutional ethics committee approval, 80 patients (n = 80, calculated by ClinCalc Sample Size Calculator), posted for elective neurosurgery were included in this study. After intubation, in Group TIVA, anaesthesia was maintained with propofol infusion. Group INH, anaesthesia was maintained with sevoflurane. Group IV+, anaesthesia was maintained with combination of propofol and sevoflurane upto 1 MAC, titrated to keep bispectral index (BIS) 40-50. The brain relaxation/bulge and surgical field was graded according to a subjective four point scale. Results: The brain relaxation score was significantly better (p = 0.033) in Group TIVA. Grade I relaxation was higher in Group TIVA n = 25 (62.5%) than in Group IV+ n = 14 (35%). Group INH was discontinued because in the 8 cases conducted, there was unacceptable brain bulge requiring intervention. Conclusion: We concluded that TIVA provide a better surgical field in view of brain relaxation as compared to the combination of IV+ Inhalational and the conventional Inhalational anaesthesia. Though the measurement of brain relaxation in our study was subjective, monitoring of ICP during first burr hole in the skull would have been objective and ideal.

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Refusal of treatment: Using four box approach to guide decision-making

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Introduction: Four box Approach includes: (I) Medical Indications - High chance of fatal aneurysmal re-rupture