Management of Cough Syncope and Hypoglycemia in a Urological Case

Sir,

Hypoglycemia may be common in fasting, elderly persons, diabetics on treatment, insulinomas, alcoholics; liver, Addison's or immune disease. Symptoms seen are sweating, hunger or tremors in a conscious patient; under low subarachnoid block tachycardia, irritability or tremors of the upper extremity and sweating may be seen. Cough syncope typically occurs in individuals with chronic obstructive pulmonary disease and usually follows a protracted bout of coughing.

We had a patient 60 years old posted for Visual internal urethrotomy for Urethral stricture. He was not a known diabetic, or having any other medical illness, but was a chronic smoker. Preoperative investigations were optimal except for WBC count of 15000 cells per cubic mm and chest X-Ray showed emphysematous picture. He was given a low subarachnoid block with 0.5 % Bupivacaine heavy and put in lithotomy position. During the procedure ECG, Spo2, NiBP were monitored. Almost at the end of the procedure he presented with severe cough, breath holding,

irritability and sudden hypotension (initial blood pressure was 130/90 mm.Hg, which came down to 70/40 mm.Hg systolic and 40 diastolic), transient loss of consciousness and tachycardia (Heart rate increased from 60 to 120) and ${\rm SpO}_2$ was 80.

Ringer's Lactate was started before the Subarachnoid block and sufficient intravenous fluids were given; and when he presented with the above symptoms, inj Mephenteramine was given in 6mg increments with fluids. Oxygen was administered via a face mask. Random blood sugar was done as a precaution, as he became very incoherent in speech and was irritable. It was 57mg%. 50% dextrose 100ml was given. After few minutes he was conscious, speaking normally and was symptom free. ECG did not show any Ischemic changes, Spo2 came up to 98 and blood pressure came up to 128/84 mm.Hg. Heart rate too returned to 90/mt.

As there was no history suggestive of Diabetes, Mellitis liver disease, any tumors; hypoglycemia was thought unlikely before initiating treatment for this patient. Hypotension may be due to decreased venous return secondary to coughing and breath holding (cough syncope), tachycardia and irritability due to hypoglycemia. Syncope may be also due to sudden release of bladder pressure during the procedure and infection in to blood stream. Later Giucose to erance test done was normal and bladder injury was ruled out by Ultrasound.

We realise that hypoglycemia should be kept in mind during treating any complications during intra operative period in the elderly. Also in chronic smokers Cessation of smoking, bronchodilators and anti-inflammatory medications have to be given for preparing the patient and to avoid cough syncope.

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