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## **Reactive Hypoglycemia Post Sleeve Gastrectomy: A Case Study**

A 48 yrs old female, 5 months post sleeve gastrectomy (SG), non-diabetic, presented with adrenergic- and neuroglycopenic symptoms of hypoglycemia at 4.5 months post-operatively. Glucometer monitoring was initiated, and measures of postprandial capillary blood glucose (CBG) ranged from 3.5-4.0 mmol/L, 60-180 minutes post meals or snacks. Fasting blood glucose was normal. She was brought to medical daycare fasted; administered 75g juice orally; and monitored with nursing care, CBG at 15min intervals. At 195 min into monitoring, CBG was 3.2 mmol/L, with typical hypoglycaemic symptoms, and STAT labs confirmed biochemical hyperinsulinism. Dedicated Pancreatic CT abdominal imaging was normal. Diagnosis was consistent with noninsulinoma pancreatogenous hypoglycemia syndrome (NIPHS) after SG.

Treatment of this, rare and sparsely-reported complication, of SG is best done by a multidisciplinary team. Nursing assistance includes education about safety recommendations for hypoglycaemic episodes. Dietetics advice involves treatment of hypoglycaemic episodes, and long term dietary directions. Despite the above recommendations, Endocrinology commenced medication therapy due to persistent illness. Acarbose failed to help postprandial hypoglycemia, CBG 1.8 mmol/L on one occasion. Subcutaneous Octreotide/Somatostatin 50-100 mcg TID acmeals, was initiated, substantially reduced the occurrence of episodes. Later Verapamil 40-80 mg PO TID acmeals, and Acarbose re-trialled, helped to stabilize occurrence and severity of hypoglycemia.

The occurrence of NIPHS after SG is sparsely reported. This is the first case in a pending series at our bariatric center. We estimate 1/200 persons undergoing SG may be at risk of developing post-operative NIPHS, and should thereby be screen regularly at followup clinical visits with all patients undergoing SG.

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