

Superior Mesenteric Artery Syndrome: A case report from Borneo

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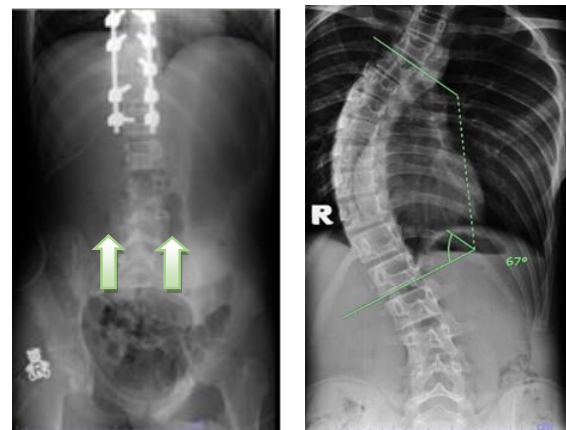
**INTRODUCTION:**

Superior Mesenteric Artery Syndrome (SMA) is also known as Wilkie's Syndrome. An angle of 45 degree is formed over at L1 branching of the Aorta. Beneath the angle lies the 3<sup>rd</sup> part of duodenum hence a reduction of this angle ultimately affects the duodenum. In normal individuals, the SMA to aortic angle is 20°-50°<sup>2</sup> It is a rare complication in scoliosis surgery

**REPORT:**

13 years old male with history of well controlled bronchial asthma and G6PD deficiency was subjected to a deformity correction surgery for his scoliosis. He was a case of Lenke I with T5-L11 (Cobb angle 67 degrees, Bending 40 degree, traction 40 degree, fulcrum 28 degree) .Mri showed no intraspinal pathology. Degree of correction was 85%. Beighton score was 3. Height was 1.5 metre, weight was 35.8 with a BMI of 14.9 kg/

Surgery took a duration of 3 hours.12 hours. Immidiate post-surgery, patient complained of pain and abdominal distention with not passing flatus and a profound range of tachycardia. No vomiting episode occurred. and Abdominal Xray showed a double bubble sign as in Figure 1. CTA mesentery done showed Aortomesenteric angle was 16 degree and SMA-Aorta distance of 2.5 mm suggestive of superior mesenteric artery syndrome.



**Figure 1 :** Abdominal Xray of patient with 'Double Bubble' sign indicated by arrows and preoperative xray , Cobb 67 degrees



**Figure 2:** Standing post operative images (Cobb T5-L1 10 degrees)

**CONCLUSION:**

Superior mesenteric artery syndrome post scoliosis deformity correction surgery is a rare complication. The acute angle formed between the aorta and the SMA is called Treitz ligament.

In scoliosis surgery, most cases presented with SMA 1 week post surgery, in this case was immediate post surgery. Patient was of low BMI with a height percentile of more than 50 with a weight percentile  $< 25$ <sup>2</sup>. Early risk stratification and adequate resuscitation was of vital in anticipating and managing a patient with SMA

**REFERENCES:**

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