

Ryle's Tube Obstruction by Ascaris Lumbricoides



Medical Science

KEYWORDS : Humanity, Better life, Ancient, Modern Philosopher

DINESH B DAVE

GAIMS, BHUJ

SAMIR D DAVE

GAIMS, BHUJ

Ascaris lumbricoides is distributed widely all over the world. In India, intestinal ascariasis is a fairly common condition probably due to tropical climate. An adult worm normally lives in human small intestine, where fertilized female lays her eggs at a rate upto 2 million per day. *Ascaris lumbricoides* has a tendency to explore orifices, ducts, cavities and may give rise to serious complications from the "wonder lust" character of the worm (Louw,1966).

An adult worm has been found in the appendix, common bile duct, pancreatic duct and Eustachian tube and many surgical catastrophies have been reported by the various related structures.

In the management of acute abdomen and comatose patients Ryle's tube aspiration and/or feeding is an accepted standard principle. Many difficulties may be experienced while carrying on with Ryle's tube aspiration or feeding. Rarely even introduction of the Ryles's tube down to the stomach is found to be difficult without the help of a competent anaesthetist. Obstruction of the Ryle's tube is a fairly common experience and is usually due to foreign body, mucus plug, blood clot or a kink. We came across an unusual Ryle's tube obstruction by a living ascaris in one comatose patient while feeding the patient through the Ryle's tube. Since this type of Ryle's tube obstruction is neither described nor reported in the literature, so the report of this unusual obstruction of the Ryle's tube is warranted.

CASE REPORT

A 50-year old Muslim female was admitted in semi comatose status. Her general condition deteriorated and vomiting persisted. She became abnormal in behavior and went into coma. This forced us to start Ryle's tube feeding in addition to intravenous fluids to maintain proper nutrition and electrolyte balance. Ryle's tube introduction was carried out on 4 occasions during her stay in the hospital. On the third occasion 6 hours after the introduction of a new Ryle's tube, administration of liquids through the tube was not possible. Aspiration through the tube was also negative even after a forceful suction by syringe. Ultimately, obstruction of the Ryle's tube was considered either by a kink or a mucus plug. Removal and reintroduction of the Ryle's tube was decided. There was a good resistance while pulling out the terminal part of the Ryle's tube through the nasal passage. After a gentle pull it was delivered with a living **ASCARIS** blocking the Ryle's tube.

The patient was given a single dose of albendazole and ivermectin combination, subsequent attempt at Ryle's tube introduction and feeding through was without any difficulty.

DISCUSSION

Various surgical complication like intestinal obstruction, acute appendicitis with perforation, ileal perforation in a typhoid fever patient, Meckel's diverticulitis, disruption of postoperative intestinal anastomosis and intraluminal intestinal obstruction have been reported due to ascariasis. Volulos and intussusceptions with worms initiating twisting or invaginations of the bowel has also been reported. Louw (lpc.cit.) reported 17 cases of pancreatitis and 11 case of biliary obstruction secondary to Ascariasis

lumbricoides. Power (1930) reported a case of ruptured empyema of gallbladder associated with *Ascaris lumbricoides*. "Biliary obstruction syndrome of Chinese" a distended gall-bladder without gall-stone, secondary to *Ascaris lombricoides* has been reported by Robinson (1966). Perforation of oesophagus has also been reported by moore (loc.cit) and woodruff et al (1961)

X-ray chest showing prominent broncho-vascular markings, prominent hilar shadows and parenchymal densities as also x-ray changes suggestive of loeffler's pneumonia and eosinophilic lung are many a time due to ascariasis (Beaver and Danraj, 1958; Nelson, 1959). Rarely, ascaris pneumonia is reported (Jenkins and Beach, loc.cit). Asphyxia and even death may rarely result from migration of the adult worm into the epiglottis and trachea.

Obstruction of Ryle's tube is a usual problem and it is generally due to kink, blood clot or a mucus plug. Kink can occur mainly at nasal, nasopharyngeal or in the esophageal passage down to the stomach. As the round worm has a tendency to explore various ducts and organs it can also pass into Ryle's tube in search of nutrition, particularly in a comatose patient. In the present case a live roundworm was responsible for the obstruction of the Ryle's tube occupying about 4 cm of its length proximal to the first feeding orifice. As the worm was alive it came out through the proximal feeding orifice of the Ryle's tube and remained hanging through the tube. Such obstruction of the Ryle's tube due to ascariasis has not been reported uptil now.

SUMMARY

An unusual obstruction of Ryle's tube by a living *Ascaris lumbricoides* is reported. Probably this is the first such report in the literature of its type.