

# Anesthetic Considerations For Laparoscopic Cholecystectomy In A Patient With Situs Inversus Totalis

H Prabhakar, M Samplay

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## Abstract

Laparoscopic cholecystectomy has become the standard operative procedure for gall bladder disease. The associated pathophysiological changes during laparoscopy require special anesthetic considerations. Occasionally, this surgical procedure may have to be carried out in a person with situs inversus totalis suffering from gall stone disease. Though the problems related to such patients are mainly of surgical feasibility, an anesthesiologist must be aware of the associated problems of both, situs inversus and the laparoscopy. Although there have been numerous reports of laparoscopic cholecystectomy in surgical journals, the subject has been rarely dealt with in anesthesia journals (1, 2).

## CASE REPORT

We report a case of a 59-year-old male with situs inversus totalis and suffering from cholelithiasis. His medical history was remarkable only for hypertension since 2 years, controlled on Atenolol 25 mg od. His chest x-ray revealed dextrocardia and a right-sided stomach bubble. ECG demonstrated right axis deviation and a right ventricular hypertrophy corresponding to the dextrocardia. An echocardiogram revealed an otherwise normal study. An ultrasound scan of the upper abdomen identified the gall bladder with stones in the left upper quadrant. Laparoscopic cholecystectomy was planned, as there have been reports confirming that situs inversus is not a contraindication for laparoscopic cholecystectomy (3, 4).

The cardiovascular and respiratory system of the patient was unremarkable. Hence the routine anesthetic management during laparoscopic surgery was carried out. It was only the theatre equipments for laparoscopy that had to be positioned in the mirror image of the normal position.

## DISCUSSION

Our patient had an uneventful intraoperative and postoperative course. However, the association of situs inversus and bronchiectasis and sinusitis as in Kartagener's syndrome, may present challenge to an anesthesiologist. The anaesthetist may be involved with patients who have sinus surgery, pulmonary surgery, infertility investigations or

possibly cardiac surgery. Of primary importance will be the assessment of pulmonary and cardiac structure and function, and also prevention of pulmonary complications in bronchiectasis patient. Physiotherapy, postural drainage, antibiotics, bronchodilators and incentive spirometry all have a role preoperatively. Knowledge of the abdominal organs and of the branching pattern of the main stem bronchi is important in categorizing malpositions. Wherever possible, local or regional anesthesia should be preferred to general anesthesia (5).

## CORRESPONDENCE TO

Dr.Hemanshu Prabhakar Department of Anaesthesiology Fortis Hospital Sector 62, Noida- 201301 India. E-mail: prabhakarhemanshu@rediffmail.com Fax: +91-120-2403222 Phone: 91-9810212971

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**Author Information**

**Hemanshu Prabhakar, M.D.**

Junior Consultant, Department of Anaesthesiology, Fortis Hospital

**Mukesh Samplay, D.A.**

Senior resident, Department of Anaesthesiology, Fortis Hospital