

planning surgery and preventing from surgical complications and repeated laparotomies [3, 4].

We present a case report of an unusual case of duplication of gallbladder in a young female patient who presented with fever and pain in the upper right quadrant region managed successfully through conservative management.

**2 Case Discussion:**

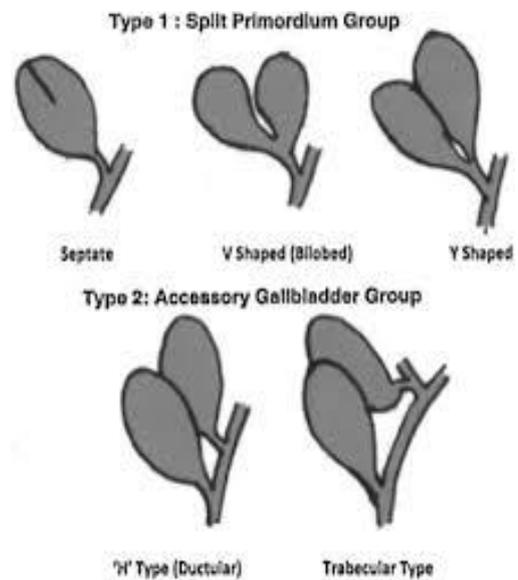
A 14 year old female presented to our hospital with complaint of pain in the upper right quadrant region. Pain was associated with frequent episodes of fever. There were no previous episodes of pain in same manner. There was no associated chronic medical illness history. Patient was pure vegetarian and consuming dairy products and food routinely. Clinically her abdomen was tender in right upper quadrant region but no palpable mass and jaundice was present.

Blood investigation revealed normal LFT and RFT but was associated with leucopenia(2900 /μl)and thrombocytopenia(16000/μl) and reactive for dengue NS-1 and weakly positive for enteric fever. Ultrasound showed duplication of gallbladder with signs of cholecystitis. Differential diagnosis included double gallbladder or gallbladder with large floppy fundus with sign of acute cholecystitis secondary to fever either dengue or enteric. Patient was advised CECT abdomen and pelvis for confirmation.CECT showed duplicated gall bladder with minimal pericholecystic fluid. No sign of any malignanct growth was seen. Diagnosis was made as duplication of gallbladder with acute acalculous cholecystitis secondary to dengue fever[5]. Patient was managed conservatively with intravenous fluid,systemic antibiotics and symptomatic treatment. Patient’s recovery was well and discharged at satisfactory condition with advice of regular follow up.

**3 Discussion**

Congenital malformations of the gallbladder have been categorized into morphological and

positional abnormalities which include malformation, deformation, multiple gallbladder, ectopias, intrahepatic position and heterotopic mucosa. Duplicate gallbladder is a morphological abnormality [6]. Double gallbladder which is a congenital anomaly has incidence of 1: 4000, however exact incidence cannot be made because only symptomatic patient report to hospital and there is incidental finding of gallbladder during radiological imaging or during laparotomy. The first reported human case was of a sacrificial victim of Emperor Augustus in 31 BC [7].

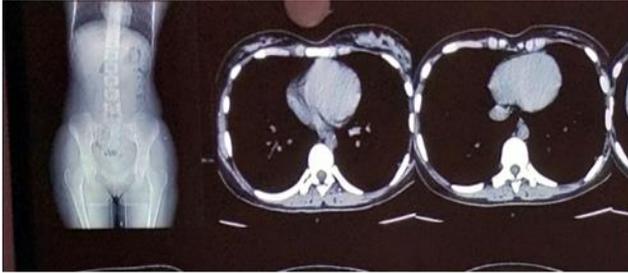


**Figure1: Boyden’s classification of duplicate gallbladder**

Boyden described the duplicate gallbladder along with its variable anatomy firstly in 1926 as depicted in figure 1. He described it into “*vesica fellea divisa*” and “*vesica fellea duplex*” according to their relation to the cystic duct. The latter was further divided into Y-shaped type and H-shaped type.

. There are two types of gallbladder i.e. Bilobed gallbladder (*vesica fellea divisum*) and Double gall bladder (*vesica fellea duplex*). It was a case of double gallbladder (second type) confirmed by CECT (figure 2) abdomen with

differential diagnosis of gallbladder fold, Phrygian cap, choledochal cyst, focal adenomyomatosis, pericholecystic fluid and gallbladder diverticula.



**Figure 2: CECT abdomen showing double gall bladder**

Clinical significance of double gallbladder is same as single gallbladder like acute or chronic cholecystitis, cholelithiasis, empyema, torsion, cholecystic fistula and carcinoma. Two gallbladder may have two different complication[8]. There is no other specific symptom or disease is associated to double gallbladder and patient is managed in the same pattern as in single gallbladder in both conditions either by conservatively or laparoscopic cholecystectomy, but surgeon should be aware about probable increased intraoperative complication associated to double gallbladder mainly iatrogenic bile duct injury which can be troublesome in postoperative period also.

#### 4 Conclusion

Duplication of gallbladder is a rare congenital anomaly that needs extra attention in surgery. Diagnostic preoperative imaging plays vital role in avoiding complications during surgery. There should be consideration of these entities and anatomic variations while examining patients with biliary disease so that unnecessary complications can be avoided.

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## ANAESTHETIC MANAGEMENT OF CAESAREAN SECTION IN AN ACHONDROPLASTIC DWARF WITH SEVERE AORTIC STENOSIS AND COPD

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### ABSTRACT

**SUMMARY:** Among 100 different types of dwarfism, achondroplasia is most common autosomal dominant and results from a spontaneous mutation. The effect of normal gestation over cardiovascular and respiratory system is particularly very significant in parturient with persisting congenital achondroplasia, cardiovascular pathology and severe obstructive pulmonary disease.

We present a case of 25 year old 34 week parturient with short stature( 3 feet 9 inches), severe AS( aortic root 14 mm), severe COPD(FEV1/FVC<70%) and cephalopelvic disproportion, who was scheduled for elective c- section but landed up in an emergency due to MSL.

After evaluating the potential risk of hypoxia, severely decreased FRC and supine hypotension general anaesthesia was given in emergency and patient was kept on spontaneous respiration. This patient was stable during intraoperative and postoperative period and was shifted to ward.

**Keywords:-** Achondroplasia. Aorticstenosis(AS) .COPD

**INTRODUCTION:** Achondroplasia is a commonest form of dwarfism which results from abnormal cartilage formation at epiphyseal growth plates, also known as short limbed dwarfism, caused by the gain of function mutations in fibroblast growth factor receptor 3 (FGFR3). 80% are sporadic mutations and 20% are inherited in autosomal dominant fashion.

This patient had severe aortic stenosis as a coexisting anomaly. Mild to moderate AS is well tolerated during pregnancy, but critical AS can rapidly deteriorate the hemodynamic and precipitate the CHF, carrying a high risk

of maternal and fetal mortality. Therefore , treatment of severe AS with percutaneous iliofemoral aortic valvotomy or aortic valve replacement is advised before pregnancy and MTP is strongly considered in symptomatic patient in 1<sup>st</sup> trimester. When the foetus is viable (>28 weeks) and symptoms of CHF are present, LSCS and concomitant AVR can be performed to decrease cardiac morbidity and mortality.

Our case report describes the successful anaesthetic management of LSCS of achondroplastic term parturient with severe