

**SINGLE PORT LAPAROSCOPIC SURGERY (SILS) IN PEDIATRIC POPULATION**

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**Introduction:** Minimally invasive techniques have revolutionised surgical treatments. Few centers worldwide have advanced SILS for pediatric age group.

**Aims:** To determine the feasibility, safety, and expediency of SILS in pediatric patients

**Material & Methods:** Retrospective study of 150 patients were operated with SILS from 2009-2016. Age of the patients range from 7days to 16 years. Covidien® port was used in 143 cases while Gelpoint® port in 4 cases and TriPort™ Access System from Olympus for 3 sleeve gastrectomy. Articulating and straight regular instruments were used in the procedures. Bronchoscope with incorporated grasper was used for ovarian cystectomy. Endo-stitches was used for Fundoplication, Morgagni hernia repair and one extra port for splenectomy. SILS procedure included: cholecystectomy, splenectomy, appendectomy, ovarian cystectomy/ovarectomy, adhesolysis, fundoplication, Morgagni hernia repair, Mitrofanoff diversion, nephrectomy, orchiectomy, sleeve gastrectomy, and volvulus.

**Results:** 42 cholecystectomy were done and extra port was needed in 2 patients. Four splenectomies were done simultaneously with cholecystectomy. We did 45 splenectomies, 10 cystectomy/overectomy, 2 volvulus repair and 1 Morgagni hernia repair. Six out of 32 appendectomy had perforated appendicitis and 4 had appendicular mass. Fundoplication was carried out for 8 patients with extra port for liver retractors. SILS assisted Mitroffanof was done in 7 patients, one of them has had right nephrectomy and left orchidectomy on the same sitting. conversion splenectomy was needed in 3. One wound infection post ovarian cystectomy.

**Conclusion:** SILS is safe, feasible and more cosmetic with invisible scar. More than one procedure could be done at the same time. The confusion of crossing image will be adapted after the first 10-15 min. The surgeon would not feel much difference from usual laparoscopy after doing few cases but it needs a good laparoscopic background.