LAPAROSCOPIC SURGERIES DURING AND POST COVID 19 PANDEMIC: ARSI / IFRS RECOMMENDATIONS FOR GILLS AND RURAL UROLOGY

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In India the prevalence of treated surgical conditions in urban population is about 13% for men and 16% for women and 40% of them are emergencies 1. Extrapolation of this data would give a figure of 2000 surgeries a year for a 100000 population in urban areas and national average of 800 per 100000 / year.

In most countries the waiting time for surgical treatment is calculated from time of diagnosis to treatment. In a study carried out 2 years ago the waiting time after getting admission to the hospital for surgical treatment in urban areas varied from 7 to 16 days 2. This is despite the fact that there are four times the numbers of surgeons in urban areas which have less than 40% of the Population 3. The waiting time for 60% of the rural population has not been studied or published.

In India the pandemic has significantly lowered the utilization of the usual services ranging from 30 to 69% 4. The number of deaths due to COVID 19 is only a very small portion of deaths due to any cause since 2020 5. Hence it is important to re- start the regular surgical work especially in rural areas.

CONSIDERATIONS

1. Laparoscopic surgery carries the highest risk of aerosols due to pneumoperitoneum and use of carbon di oxide gas 6.
2. Regional anaesthesia is better than General Anaesthesia during the pandemic 7.
3. SARS CoV 2 concentrations detected in peritoneal fluid were higher than in the respiratory tract 8.
4. Although virus could be found in the Urine it is less often than in blood, body fluids or nasal swab 9.

RECOMMENDATIONS

These special recommendations are from Association of Rural Surgeons of India 10 and International Federation of Rural Surgeons 11 for surgeons working in rural and remote areas. These are in addition to the Government rules and regulations 12.

The Objectives of the recommendations are as follows

1. Safety of the staff and the patients at the facility
2. To have less travel for the patients and relatives
3. To prevent crowding of people
4. To provide emergency / elective surgical care
5. To follow the local government rules

The special recommendations that are specific to our areas are as follows

1. GAS INSUFFLATION LESS LAPAROSCOPIC SURGERIES [GILLS]

The GILLS recognised by the WHO Compendium of innovative health technologies in low and middle-income countries 13 makes laparoscopic surgeries possible under Spinal Anaesthesia. These should be used in rural areas if feasible due to the following advantages 14

* Less hospital stay
* Less contamination as aerosols are generated within the abdomen
* Less personnel in the Operating Room

Our recommendation is that GILLS surgeries could be carried out in rural areas with sufficient precautions as mentioned in the general guidelines both for elective and emergency surgeries.

1. LAPTOP CYSTOSCOPE AND DJ STENTING

The incidence of renal stone disease is increasing all over the World 15 and it is estimated that 12% of the Indian population is prone to renal stone disease 16. Renal Colic is a very severe pain and causes significant morbidity. Ureterorenoscopic removal of the renal stones is a cost effective patient friendly option for removing renal stones in rural areas 17. This involved prior DJ stenting that dilates the ureters, prevents pain and complications related to obstruction and is the first stage of elective treatment. The Laptop Cystoscope 18 that does away with the Telescope, the light source, monitor and other accessories that are necessary for the traditional cystoscopy set up. It has a camera that directly connects to the Laptop computer. This would save significant morbidity and would involve less travel for the patients

Our recommendation is that DJ stenting could be carried out for ureteric / renal colic in rural areas.

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