

Rural Surgery: Review and Experience

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INTRODUCTION

Rural surgery is a concept which renders the surgery at the door step of rural masses. The lack of infrastructure and poor working condition are factors which are responsible for a surgeon opting for day surgery in a rural setup. The low cost surgery is another essential which rural surgery requires. The concept of rural surgery is not new but exemplary rural surgeons are rare. Rural surgeons work under resource constraints but day surgery in rural circumstances is not different than surgery in an urban centre. So the quality of surgery is no way different. This is also reiterated by world medical assembly in 1964 at Helsinki and again 1983 at Venice. In its recommendation concerning medical care in rural area it was emphasized that "although there may be economic and other factors affecting the quantity of medical services available in rural areas, there should be no disparity in the quality of medical services. The same holds true for rural surgery¹.

Beside there are more challenges for a rural surgeon. The rural surgeons are in no way second class surgeons². Awareness of rights of patient is increasingly felt. The rights of patient are so clear reflection of cultural, political, economical and social change that has taken place and medicine cannot ignore this e.g. a patient of early breast cancer can always ask a surgeon why she cannot have breast conservation surgery or why a patient cannot have sphincters preserved particularly if results are same. This can produce complication in doctor patient relationship³.

Health is responsibility of state which provides equal opportunity of health to all citizens. The present health care delivery system is based on financial and social status of patient. If the patient is rich then he can get best care, but if he is poor man, then God can only help him. The value based surgical profession has been totally transformed into a price oriented system⁴. Out of guiding forces of market economy with principal of sale and purchase has eroded the ethical component of our professional conduct at the behest of materialistic orientation. Can a poor man or even a middle class person of our country have any resource at their disposal to join a firsthand access to be so called advanced surgical health care? Can he afford a renal or liver transplant, coronary bypass or on brain tumour surgery. Can he afford second level chemotherapeutic drugs, hip or knee replacement. No he cannot, so the alternative is to decay and die. This is so in spite of the fact that we have resolved to constitute ourselves into a welfare state with our constitution, where every citizen in guaranteed life, liberty, equality and fraternity.

About 7% of seriously ill leave a tertiary care hospital because they cannot continue to afford the health care delivery system. The number is obviously much more in private hospitals. It is not only finances which determine quality but also geographical location of the patient⁵. In India, we have surgical centres of excellence where even perforated duodenal ulcer or extra dural haematoma cannot be treated. Effective referral system does not exist and therefore patient either falls prey to quacks or reaches a competent surgeon at a very late stage. I am aware of all that is laid down in guide lines and accepting how important is to follow these guidelines. It appears that these guidelines would shudder or shrivel at mere thought of instrument being sterilised in boiling water on kerosene stove, surgeon operating with one unqualified and untrained assistant, anaesthesia conducted by unqualified anaesthetist with open ether anaesthesia. The same surgeon does all operations. Although guidelines are unattainable, rural surgeon can perform all surgical procedures in this situation. There is always a controversy whether state of art technology is suitable for rural surgeons. Each new technology attracts a surgeon because it is a challenge to skill of surgeon. Such are the demands of society in which a rural surgeon has to work with all compassion and care giving relief to rural masses⁶.

MY EXPERIENCE

I have the pleasure to describe my experience of working in a rural set up Uttam clinic, Kalanaur. I have completed ten years doing rural surgery. This set up is away from highway. This rural set up has facility of a operation theatre with operation table, light, air conditioner, instruments and other equipment. The facility for biochemical tests, X- rays and ultrasonography also exists. The procedures which are done include:

1. Emergency procedure
2. Minor procedures
3. Day care surgery
4. Major surgical procedures

5. Laproscopic surgery
6. Endoscopic surgery
7. Plastic surgery, Paediatric surgery, Urology, Oncosurgery
8. Orthopaedics, gynaecological surgery, ENT surgery

The various emergency procedures like thrasher injuries, finger injuries, tendon repair, upper limb amputation, and these agricultural injuries are particularly important for citation. Such emergency procedures are done under local anaesthesia or nerve block. The chest trauma was managed with intercostal nerve block and drainage.

Minor surgeries were performed under local anaesthesia as done by most general surgeons. These include sebaceous cyst, dermoid cyst, papilloma, lymph node biopsy and so on. Even small area of skin grafting is done under local anaesthesia. The skin graft was taken using surgical blade or shaving blade.

Day care surgery is the main stay of rural surgery. This helped in reducing cost of anaesthesia and surgery. I have one example, meshplasty of inguinal hernia under local anaesthesia. This is being done using small size polypropylene mesh, one polypropylene suture, single intraoperative antibiotic injection followed oral antibiotics and domiciliary treatment. Besides inguinoscrotal swellings, I am doing most of anorectal surgeries like piles, fissure, and fistula and pilonidal sinus. The major surgical procedures like cholecystectomy, pyelolithotomy, nephrectomy, hemicolectomy, intestinal resections, thyroidectomy and modified radical mastectomy were done under general anaesthesia.

For general anaesthesia, help of anaesthetist from a nearby city is taken. Major surgery includes Laproscopic cholecystectomy, gynaecological surgery like vaginal and abdominal hysterectomy. Common plastic and urological surgeries are also done.

DISCUSSION

Skilled man power is not available in rural areas. All paramedical staff employed in this rural centre is self trained. ECG technician, X-ray technician, theatre master for sterilization, theatre nurse and assistant are unqualified but self trained. This man power has been trained according to needs of surgery. Post operative care by unqualified staff makes us to work round the clock and remain vigilant about complications. These extra hours always bring fruits in management of complications. By short training the professional skill of doing laparoscopic and endoscopic procedures were developed. As and when possible the patients are given options of choosing a surgical procedure and price estimate. Rural surgery never means that it is a below poverty line surgery. We have both below poverty line and middle class with agricultural background.

What to do and what not to do depend on the skill of surgeon. In this materialistic society, the will of surgeon to treat rural masses is also essential. If a balance can be achieved between skill and will, sky is the limit of surgical procedures to be done at rural set up.

The limitation in rural surgery is also due to availability of blood. The blood bank services take time due to distance. Similar are facility of CT scan and MRI available at a distance.

The legal problems should be avoided by selection of cases.

For last ten years of practice of rural surgery, I think of successful and progressive initiative to fulfil expectations of rural population.

CONCLUSIONS

- Rural surgical centre serves rural masses.
- Rural surgeon has to adopt multi speciality approach.
- Practically it is a one man show for all type of surgeries.
- Low cost surgery is another essential to be compatible with rural masses.
- Creation of five star hospitals is not essential but flexible services can serve the rural masses.
- Training of unqualified staff is a challenge but consistent efforts can overcome this difficulty.
- Many surgeries can do under local anaesthesia as day care surgery to reduce the cost input.
- For general anaesthesia or spinal anaesthesia help of anaesthetist from a nearby city can be taken.
- All general surgery procedures, abdominal surgery, urology, plastic surgery, laparoscopic and endoscopic surgery are possible.
- Rural surgery is no way inferior to surgery in city hospitals.

REFERENCES

- [1]. Prabhu RD. Rural surgery. Indian J Surgery; 2003, 65: 22-23.
- [2]. Tongaonker RR. Scope and limitations of rural surgery. Indian J Surgery; 2003, 65: 24-29.
- [3]. Ramakrishna HK. Taking newer technologies to rural patients. Indian J Surgery; 2003, 65: 38-40.
- [4]. Banerjee Shipra, Human resource development in rural surgery: Developing the paramedic training programme. Indian J Surgery; 2003; 65: 60-65.
- [5]. Prabhu RD. Surgery in rural India. Indian J Surgery; 2001; 63: 269-72.
- [6]. Sharma KC, Sharma Uma, Sharma Navneet, Innovations in rural surgery. Indian J Surgery. 2003; 63: 73-76.

