Let’s create facts not perceptions!

There is no other surgical specialty, which has witnessed a technological boom as big as urology. I recently met a young urologist who started his career in a mid-level town in north India by taking short-term training and buying a flexible ureteroscope (fURS) 4 years ago. He had a very good practice and treated a variety of renal stones with a new technology in the town. I was surprised to know that he switched his loyalty to mini PNL and the initial euphoria of fURS was gone! What changed his mind? He is not tuned to evidence as most of the academicians are and he represents the majority of urologists in real-life practice!

His reasons were lower clearance rates and high complications which led to patient’s dissatisfaction. He did make money but what made him switch his approach to PNL was the need for 100% satisfaction of the patients. His take on perception that fURS is the best has changed!

Facts are overshadowed by perception and most of us fall victim to perception created by a few, which is more often than not is misconceived. Similar perceptions are being created about robot-assisted surgery.

Technological evolution is inevitable and should be welcomed and promoted but on real facts and not at the altar of perception. Robotic assistance has truly helped overcome the limitations of laparoscopic instruments but have these potential advantages translated to the addition of true value in delivering surgical care remains debatable. With the lack of competition in the market, there is creation of a perception that the robot is technologically superior in providing surgical care.

When we acquire a robot, we need to justify the cost, and in that bargain, we may end up hiding facts from the patients. The facts are overshadowed by pressure to perform or perish. This perception has led to pressure on the surgeons, hospitals, and patients as well resulting in steep rise in acquisition of robots in India too. Patients are asking for robotic assistance for simple nephrectomy, hernia surgery, and varicocelectomy, giving technology undue credit.

Robotic instruments were designed for approaching difficult places in the body and they definitely are of advantage in such situations but to justify the cost, a number of the indications are being expanded to surgeries with inherently good outcomes. Randomized trials and meta-analyses have not shown an addition of value to surgical outcome to justify the cost of the equipment. As of now, robot assistance does not result in statistically improved treatment outcomes with the exception of lower blood loss in few indications.[1]

Another perception created by the single market force is that the robot makes the life of a surgeon comfortable. A recent survey has highlighted this and more than 50% of surgeons have reported symptoms such as neck stiffness, finger, and eye fatigue that are proportionate to the number of hours one sits on the console. A higher rate of lower back stiffness was correlated with the higher annual robotic case-load.[2,3]

Regulation is mandatory to stop the misuse of a tool to justify the cost of acquisition. The National Health Services in England has stated in its policy document, after carefully reviewing literature, that there is not enough evidence to justify funding for robot-assisted radical cystectomy.[4]

Despite four generations of technological advances in the current robotic system, the answer to the moot question, that is, whether its use will translate into better outcomes is still elusive.[5] Till we find answers, we should not let perception eclipse the facts in medicine.

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REFERENCES
1. Roh HF, Nam SH, Kim JM. Robot-assisted laparoscopic surgery versus conventional laparoscopic surgery in randomized controlled trials: A systematic review and meta-analysis. PLoS One 2018;13:e0191628.
2. Lee MR, Lee GI. Does a robotic surgery approach offer optimal ergonomics to gynecologic surgeons? A comprehensive ergonomics survey study in gynecologic robotic surgery. J Gynecol Oncol 2017;28:e70.
3. Lee GI, Lee MR, Green I, Allaf M, Marohn MR. Surgeons’ physical
Mandhani: Hype versus reality

discomfort and symptoms during robotic surgery: A comprehensive ergonomic survey study. Surg Endosc 2017;31:1697-706.
4. Available from: https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/07/16033_FINAL.pdf. [Last accessed on 2018 Mar 25].
5. Rassweiler JJ, Autorino R, Klein J, Mottrie A, Goezen AS, Stolzenburg JU, et al. Future of robotic surgery in urology. BJU Int 2017;120:822-41.

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