

Operation Anubis: A New Step in NOTES (Natural Orifice Transluminal Endoscopic Surgery)

HISTORY! IRCAD-EITS team has successfully performed *the first totally NOTES cholecystectomy* at the University Hospital of Strasbourg, France.

On April 2nd 2007, at the University Hospital of Strasbourg, Professor Jacques Marescaux and his team, B. Dallemagne, MD, S. Perretta, MD, D. Mutter, MD, PhD, FACS, A. Wattiez, MD, D. Coumaros, MD, successfully performed the first no scar surgery. This first human incisionless operation was carried out using a flexible endoscope for transvaginal cholecystectomy in a 30-year-old woman with symptomatic gallstones.

This world first, called "operation Anubis", was presented at the Japanese Congress of Surgery in Osaka on April 6th and during the Congress of the Society of American Gastrointestinal Endoscopic Surgery (SAGES) last week-end in Las Vegas.

Anubis was the ancient god in Egyptian mythology who restored Osiris to life through mummification using long, flexible instruments. The project was named after this reference.

Change is part of surgery and change is never easy to accept. At the dawn of surgery, excellence was associated with big incisions: "big scar - big surgeon". In 1987, Philippe Mouret performed the first laparoscopic cholecystectomy. The Anglo-Saxon world called it the "second French revolution": minimally

invasive surgery was born representing one of the greatest surgical evolutions of the 20th century.

Since its inception in 2004 geared up by A. Kalloo, MD, the idea of endoluminal surgery has been till now only experimental, except some cases of hybrid appendectomies performed by N. Reddy in India.

An important step was made by the Columbia group in New York, United States on March 20th, 2007 when a hybrid transvaginal cholecystectomy was performed with the assistance of three laparoscopic trocars.

Operation Anubis performed without incision, save from using a 2mm needle allowing for insufflation and control of intra-abdominal pressure, represents an extremely important step towards totally non-invasive surgery. The next challenge will be to validate other approaches, the transgastric route being the most appealing.

The justification of this technique are: the reduction or absence of postoperative pain, ease of access to some organs, the absence of trauma to the abdominal wall, ideal cosmetic results and the psychological advantages of eliminating the bodily trauma represented by surgery. Lastly and as pointed out by P. Swain, this provides proof that there are no limits to how human ingenuity and technology can reduce the physical and emotional trauma related to the surgical act.

Dr. Arun Prasad,
*Senior Consultant Surgeon,
Indraprastha Apollo Hospitals,
Sarita Vihar,
New Delhi 110 076, India.*