LAPAROSCOPIC BOWEL SURGERY

What is laparoscopic surgery?
This is when the operation is performed through small incisions with special equipment. The size of the largest incision is determined by the size of the pathology but is much smaller than conventional open surgery.

Can all operations be performed laparoscopically?
Not all parts of the colon can be resected laparoscopically for reasons such as accessibility and blood supply. However increasingly with better equipment more and more operations are performed laparoscopically.

Does laparoscopic surgery require special training?
Laparoscopic surgery is more complex than open surgery and requires specific training. Dr Pathma-Nathan was among the first to perform these operations in Westmead and surrounds. He has trained several fellows and registrars in these techniques.

Is the operation the same as in open surgery?
The operation is exactly the same in terms of how much bowel is removed and techniques of anastomosis. It has been shown in studies to be equivalent in terms of cancer surgery. There are no differences in complications such as leak rates, stoma requirement or bleeding.

What are the benefits of laparoscopic surgery?
As there are smaller incisions there is less pain, quicker mobilisation, earlier return to normal activities, less issues with respiratory problems, less DVT and less scarring. Long term there is less adhesion formation and less hernia formation.

Is it bad if the operation is converted from laparoscopic to open?
There are some studies that report worse outcomes if the operation is commenced laparoscopically and then converted to an open one. This relates most likely to the difficult nature of the operation requiring conversion. This may be in turn related to the pathology encountered, bleeding, technical problems with equipment or damage to other organs. If the operation is converted sooner rather than later the outcomes are no different.

What are the complications of laparoscopic surgery?
These are the same as for open surgery plus some specific to laparoscopy. These are very rare.

1. Damage to structure while placing the operating ports: ports are placed in different positions to accept the operating instruments. Sometimes the ports can damage structures in the abdominal cavity requiring repair.
2. Problems with high pressures in the abdomen due the gas used: the high pressures required to perform the operation can compromise lung and heart function.
3. Venous gas embolisation: a rare life threatening complication where gas enters the venous system and enters the lung and heart. Specific treatment is undertaken and the operation may need to be ceased.

4. Pneumothorax: gas can escape from the abdominal cavity into the chest. Placement of a drain into the chest is required.

5. Inadequate views and compromised operation: essentially the operation is the same but not all parts of the colon are equally accessible safely and some conditions are more difficult to treat laparoscopically. The operation will then need to be performed in a conventional open manner.

Is the aftercare the same as for open surgery?
In general there is no difference but you will recover sooner. The postoperative management is the same. You will return to normal activities sooner.