Improving surgical skills

The medical industry is working on updating surgeons about the latest devices to help increase their efficiency and improve patient outcome.

Prof April says the proper use of the latest energy devices in a complex surgery could mean the difference between life and death. — FAHAN GHANI/The Star

A good surgeon might not necessarily be a good trainer, so it is necessary to have a good surgical coordinator to conduct the workshops. — Photos: Filepic

Medical devices have become increasingly complex and require specific training for surgeons to be able to use them effectively and safely.

"A good surgeon may not necessarily be a good trainer, so we had to spend time identifying suitable surgical consultants in the country, and also in the region, and then put together a series of training courses." This evolved into the Science of Tissue Management (SoTM) workshop, which is run in collaboration with Johnson & Johnson Malaysia.

The workshop exposes surgeons to the latest surgical technologies, providing them with hands-on experience using better-designed equipment that is less invasive, promotes faster recovery and reduces post-surgery pain.

It has been so successful that GMAM has designed a third memorandum of understanding (MoU) with Johnson & Johnson Malaysia to extend the workshop collaboration for another three years.

The workshops are primarily intended to help medical officers in surgical departments and junior surgeons on how to understand interrelationships between medical devices and tissues. Sometimes, senior surgeons join in too.

Learning the tools

Each workshop is divided into four modules. One module focuses on the use of the latest energy devices to cut or stop bleeding.

Prof April explains, "Methods have evolved over the years. We used to use cautery to stop bleeding. Now, we use energy devices to stop bleeding, which is more effective and safe."

The second module is on wound closure, the third is on minimally invasive surgery, and the fourth module is on malignancy.

"The new energy devices can sense the temperature and current and will not run through the area if the temperature is too high or low. This is a really targeted way of delivering energy."

"The newer technologies will make much difference if you're removing a mole, for example, but with complex operations like pancreatic cancer, they make a difference between life and death."

Another device surgeons learn to use in the workshops is the surgical stapler. Much like the stationary stapler, it is used to join two pieces of tissue together.

"This can be applied in many circumstances, such as stapling the bowels, lung or stomach during surgery. Current staplers can also help stop bleeding more quickly."

Prof April gives an example of cutting a tumour from the bowel. In the past, once the tumour was removed, the surgeon would join the two ends of the bowel by using sutures to sew it together.

"This takes time and skill, and the surgeon needs to have great dexterity."

In the workshops, the surgeon would then use the stapler to join the two ends of the bowel, which is much faster and more efficient.

The current generation of staplers is so sophisticated that they will not fit for function if they are not used at the right tissue thickness. In such cases, the surgeon would then have to adjust the height of the stapler.

"A good surgeon might not have all the skills, but a good surgical coordinator is necessary to help them."

"The quality of the stapler is very important. If it's not properly adjusted, it can cause damage to the tissue."

"The team is always looking for ways to improve the stapler, and they have done so, and we're always trying to improve our skills."