Open surgery better than laparoscopic for repair of inguinal hernia

Scott Gottlieb *New York*

The open surgical repair of primary inguinal hernias is better than the laparoscopic technique for mesh repair, a new study has shown (*New England Journal of Medicine* 2004;350:1819-27).

Laparoscopic primary repair of hernias had been previously reported to result in low recurrence rates and to be associated with substantially less pain in the immediate postoperative period and earlier return to normal activities compared to open repair (*New England Journal of Medicine* 1997;336:1541-7). But the laparoscopic technique requires general anaesthesia (because the abdominal cavity has to be inflated with air) and it is more often associated with serious intraoperative complications than is open repair, although such complications are infrequent (*Lancet* 1999;354:185-90).

In the current study, researchers led by Dr Leigh Neumayer of the Department of Surgery at the University of Utah in Salt Lake City randomly assigned men with inguinal hernias at 14 Veterans Affairs medical centres to either open mesh or laparoscopic mesh repair. The primary outcome was recurrence of hernias at two years; the secondary outcomes included complications and outcomes, such as reported pain and time off before returning to work.

The researchers randomly assigned 2164 patients aged 18 years or older to one of the two procedures. A total of 1983 patients had an operation, and two year follow up was completed in 1696 of the patients (86%).

Recurrences were more common in the group having laparoscopic surgery (87 of 862 patients (10.1%)) than in the group having open surgery (41/834 (4.9%)) (odds ratio 2.2; 95% confidence interval 1.5 to 3.2). The rate of complications, including injury to spermatic cord, injury to a vessel, orchitis, and wound infection, among other complications, was also higher in the laparoscopic repair group than in the open repair group (39.0% *v* 33.4%; adjusted odds ratio, 1.3; 1.1 to 1.6).

Open repair of inguinal hernias, as for the indirect hernia pictured above, leads to fewer recurrences than laparoscopic repair, a new study says

The laparoscopic repair group had less pain on the day of surgery (difference in mean score on a visual analogue scale, 10.2 mm; 95% confidence interval 4.8 to 15.6) and at two weeks (6.1 mm; 1.7 to 10.5) and returned to normal activities one day earlier (adjusted hazard ratio for a shorter time to return to normal activities 1.2; 1.1 to 1.3).

Although recurrence was significantly more common after laparoscopic repair than after open repair of primary hernias, rates of recurrence after repair

of recurrent hernias were similar in the two groups (10.0% and 14.1% respectively). The presence of bilateral hernias did not alter the rate of recurrence after either procedure.

In an accompanying editorial (pp 1895-7), Dr Danny Jacobs of Duke University Medical Center in Durham, North Carolina, said that the findings showed that "most general surgeons can achieve excellent outcomes in hernia repair by using the tension-free open technique with local anesthesia." □

WHO urges Africa to use more effective malaria medicines

Gavin Yamey *BMJ*

Hoping to put an end to criticisms by malaria researchers of its malaria treatment strategy (24 January, p 183), the World Health Organization stated unequivocally last week that African countries experiencing resistance to conventional drugs should switch to using more effective, artemisinin based combination therapies.

"At least one million children die every year in Africa from malaria," said Dr Lee Jong-wook, WHO's director general. "Several million more become seriously ill. In many places, they are still given medicines whose effectiveness is very low, and decreasing. Better treatment is available and must be delivered urgently to the people who need it most."

WHO says that it made its

position on artemisinin based combination therapies clear many years ago, but its critics say this policy is simply not being implemented on the ground.

Since April 2001, WHO's official policy has been to recommend that countries that are experiencing resistance to standard drugs—such as chloroquine and sulfadoxine pyrimethamine—should instead use more expensive, but much more effective, artemisinin based combination therapies.

Yet an international group of malaria researchers says that WHO "violates its own policy standard regularly" (*Lancet* 2004;363:237-40). When countries apply to the Global Fund for money to buy malaria drugs, they get technical advice from WHO country representatives.

These representatives, says the group, have sometimes given their approval for "applications for ineffective drugs that violate WHO policy."

WHO argues that it can urge countries to adopt artemisinin based combination therapies, but many countries worry about whether they will receive the long term external funding needed to buy these medicines.

"We will continue to strongly advocate for a rapid scale-up of artemisinin based combination therapies," said Dr Jack Chow, assistant director general for HIV/AIDS, tuberculosis, and malaria at WHO. "Some countries are still reluctant to adopt ACT [artemisinin based combination therapies] treatment policies because [the treatment] is much more expensive than conventional therapies. Countries feel insecure about the sustainability of donor support as they switch to more costly treatment regimens."

WHO estimates that donor support of an extra \$1bn (£0.6bn; €0.8bn) a year would

pay for artemisinin based combination therapies for 60% of people who need them.

Dr Allan Schapira, coordinator of WHO's malaria policy and strategy team, says that WHO "has the right policy" but that now "the international community must put in more money. The ball is in the donors' court." The amount of funding available through the Global Fund, he said, is still "very far from the \$1bn figure."

Dr Amir Attaran, associate fellow at the Royal Institute of International Affairs and an outspoken critic of WHO's malaria strategy, welcomed the organisation's renewed focus on artemisinin based combination therapies.

But to see whether WHO's commitment is genuine, he argued, we need to wait until the results of the fourth round of funding from the Global Fund, when we will see whether more African countries are switching to using artemisinin based combination treatments. □