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Vasectomy recommendations issued by international group

The use of fascial interposition, no-scalpel techniques favoured

By KAREN RICHARDSON

WASHINGTON, D.C. - Vasectomy experts agreed at a recent meeting here that modifying a simple ligation and excision technique by adding fascial interposition reduces the likelihood of vasectomy failure.

The research findings from the Expert Consultation on Vasectomy meeting have important implications for improving vasectomies, particularly in low-resource settings.

Simple ligation and excision vasectomy involves cutting and removing a short piece of the vas deferens, then blocking the two remaining ends. Fascial interposition consists of pulling the sheath that covers the vas over one severed end.

Two Canadian vasectomy experts who took part in the meeting, Dr. Neil Pollock of Vancouver and Dr. Michael Labrecque of Quebec City, concurred with the recommendations on vasectomy occlusion techniques.

"There is good evidence in favour of ligation and excision with fascial interposition over ligation and excision alone," said Dr. Labrecque, professor in the department of family medicine at Laval University in Quebec City. "There is fair evidence in favour of cautery combined with fascial interposition over any other technique. Good data are unavailable to fully support use of any other occlusion method."

"The occlusion technique of cautery with fascial interposition to block the vas has been extremely effective in my practice. I have (seen) just one 'known' failure (positive semen test) in my last 5,000 vasectomies," said Dr. Pollock in an interview. Dr. Pollock, a vasectomy surgeon in Vancouver and clinical instructor for the University of British Columbia medical school, said any quoted failure rate should be qualified by the word "known" because some men are not compliant with post-vasectomy



In a vasectomy, fascial interposition consists of pulling the sheath that covers the vas over one severed end.

semen analyses.

International experts recommended training for vasectomy providers focus on the potential increased effectiveness of vasectomy when fascial interposition is added to the standard technique.

Based on analyses of sperm counts, this modification more than halves the chance of vasectomy failure, according to a multi-centre trial presented at the meeting that was conducted by Family Health International and EngenderHealth, sponsors of the meeting.

"This trial, the first large randomized, controlled trial of a vas occlusion technique, resolves some of the conflicting results from studies of fascial interposition that have been conducted since 1978," said Dr. David Sokal, associate medical director of Family Health International in Research Triangle



Dr. Neil Pollock

Park, N.C., and lead clinician in the study.

Results from the study of 841 men showed that combining fascial interposition with ligation and excision resulted in 91% of men reaching a low sperm count (less than 100,000 sperm per 1 ml of semen) by 14 weeks after surgery compared with 82% of men without fascial interposition.

Experts agreed further research is needed on simple ways to train clinicians in fascial interposition, in addition to ways to use cost-effective cautery devices in low-resource settings. "The reason ligation and excision has caught on in low-resource settings compared with cautery is because it is less expensive," said participant Dr. Thomas Pritchett, urologist and clinical assistant professor at the University of Washington in Seattle.

Experts also discussed the potential use and reprocessing of low-cost thermal cautery devices for vasectomy in low-resource settings. Where resources, training and logistical support are available, experts agreed cautery can be considered an effective and safe way to block the vas.

"There are no randomized, controlled trial data on cautery occlusion; however, it appears that cautery is more effective than other occlusion methods," said Dr. Mark Barone, senior research manager for EngenderHealth in New York, who presented at the meeting.

Experts recommended the use of the no-scalpel vasectomy (NSV) over the standard incisional approach because it has significantly fewer side-effects and complications than the standard incisional approach.

"We can give a blue ribbon to the no-scalpel vasectomy as the best available method."

Comparing the NSV technique with the standard incisional technique, Dr. Pollock said: "With the no-scalpel technique, my complication rates have been extremely low and consistent with studies that support an eight-times lower complication rate related to hematoma and infection."

Dr. Pollock currently performs more than 40 no-scalpel, no-needle vasectomies per week, which he said is estimated to be approximately one-third of all vasectomies performed in the B.C. lower mainland.

"We can give a blue ribbon to the NSV as the best available method," added Dr. Labrecque, who has performed more than 7,000 vasectomies using the NSV approach. Dr. Labrecque said it is difficult to compare vas occlusion techniques due to insufficient systematic, long-term followup and the fact that definitions vary. "There are more than 30 vas occlusion techniques, but ligature by tying of the vas is probably the most common technique used worldwide, although the vas can also be ligated with clips."

Dr. Labrecque said there are not enough data to support one method over the other. Dr. Pollock agreed and noted his current technique involves leaving the testicular end of the vas open while blocking the prostatic end. He adopted this technique based on studies from Australia and the U.S. that suggested it may reduce the risk of congestive epididymitis and post-vasectomy pain.

International experts also concluded further research is needed on post-vasectomy pain and that semen analysis may soon be easier with a new test developed but not yet approved in the U.S. or Canada.