is probably equal — about 25% — with either surgery or radiation, he said.

Fair and others said that in some cases, radiation might be preferable to surgery. Besides impotence and incontinence, complications of prostatectomy include blockage of the urethra by scar tissue, as well as the usual risks of surgery: heart attack, blood clot, and pneumonia, said Catalona.

Estimates of the chance of impotence after prostatectomy range from 15% to 90%, although that condition has become treatable (see News, Feb. 5). In contrast, although the complications of radiation are unpleasant, including damage to the rectum or bladder that can cause chronic diarrhea or irritable bladder, the likelihood of permanent damage is only 3% to 4%, said Catalona.

Furthermore, following surgery with radiation, as oncologists often do if cancer has escaped the gland and the PSA starts to rise, exacerbates complications, said Catalona.

“If you can’t remove all the tumor, I don’t see the rationale for cutting out 99%,” said Fair. But “if you can remove all the tumor it’s hard to dispute the fact that surgery is the better way to go.”

**No Direct Comparison**

However, no studies have directly compared surgery and radiation, said Fair, because many patients refuse to be randomized. Intuitively they can’t help thinking that one or the other procedure must be better for them.

Nor, for that matter, have any published studies compared surgery with watchful waiting, said John Wasson, M.D., director of the Center for Aging, Dartmouth Medical School, Hanover, N.H. Without control groups, the various studies “merely show some people survive a long time with poor prognostic factors.”

In fact, after independently reviewing the world literature on prostate cancer, the U.S. Preventive Services Task Force and the American College of Physicians have both recommended against screening for prostate cancer. Along with the American Urological Association and institutions in Australia and the United Kingdom, these groups have concluded that randomized clinical trials are needed to sort out currently undetectable differences in outcomes after surgery, radiation, or no treatment.

The irony is that “surgery appears to be effective in slow-growing tumors or people who are older,” said Timothy Wilt, M.D., associate professor of medicine at the Minneapolis Veterans Administration Medical Center. “Those are just the people who may not need surgery,” because they are unlikely to die of their disease.

Conversely, among those with fast-growing tumors thought to have been completely extracted, about 85% showed evidence of recurrence within 5 years, said Wilt.

Two large-scale studies are comparing prostatectomy with watchful waiting. Wilt is principal investigator for the Prostate Cancer Intervention Versus Observation Trial, a 15-year study that, 2 years out, has accrued several hundred out of a planned 1,050 patients. Participants must have clinically localized disease, be under 75 years of age, and be candidates for radical prostatectomy.

The other study is being conducted by Bo Norlen, M.D., head of urology at University Hospital, Uppsala, Sweden. Most of the 600 patients have been enrolled.

— David Holzman

**SV40: Working the Bugs Out of the Polio Vaccine**

Researchers who study simian virus 40 always have agreed on one point. In the late 1950s, SV40 was one of several dozen viruses that contaminated the original Salk and Sabin polio vaccines administered to millions of schoolchildren in the United States and Europe.

But there most of the agreement ends. Almost 40 years after the first polio vaccines, researchers still debate whether SV40 is infectious in humans, whether some people might have been exposed to SV40 before the polio vaccines, and whether, as shown in hamsters, exposure to SV40 can be linked to cancer in humans.

**Interest Rising**

As a first step toward bringing these issues to closure, three U.S. government agencies recently cosponsored a 2-day workshop at the National Institutes of Health to evaluate the state of SV40 research. While none of the agencies yet have new initiatives in the pipeline to bolster their current work on SV40, some indicated that this could soon change. Interest in SV40 and the polio vaccines is on the upswing in the United States after several laboratories reported finding “SV40-like” DNA sequences in osteosarcoma, mesothelioma, ependymoma, and other rare human cancers.

Workshop sponsors included the U.S. Food and Drug Administration, the National Cancer Institute, the National Institute of Child Health and Human Development, and the Centers for Disease Control and Prevention.

The resounding take-home message of the workshop was that researchers
must define a standard protocol for polymerase chain reaction testing of archived tumor samples for SV40 DNA. PCR conditions, particularly those that lead to false positives, emerged as an issue after several laboratories failed to replicate the PCR studies of other groups that detected SV40 in selected human tumors.

“Setting up appropriate PCR conditions with fragmented, paraffin-embedded tissue samples is now more an art than a science,” said John Lednicky, Ph.D., a scientist at Baylor College of Medicine, Houston. “We really need to put our heads together to come up with worthwhile protocols.”

Other issues highlighted at the meeting largely agreed that data presented at the workshop from Germany, Sweden, and the United States showed no detectable increase in cancers potentially linked to SV40 since the first polio vaccines.

Some scientists pointed to recent laboratory findings that SV40 may be present in some human tumors, suggesting it might be a potential pathogen in people. But others countered that there is a major distinction between detecting a virus in a cell and knowing what it’s doing there.

“Maybe SV40 is there or maybe it’s not,” said NCI’s Howard Strickler, M.D. “But, even if it is there, are there additional data to which people can point to show it’s harmful?”

Strickler and others stressed throughout the workshop that association does not necessarily translate to direct causation. “The issue of causality and how we need to assess it is something we need to think about more soberly,” said Strickler. “The strength of association has yet to be fully worked out.”

After the session, many attendees remarked that the workshop had shown there’s still a lot of work left to do in SV40. Framing the relevant research questions in Bethesda was a critical first step in laying out a common path of inquiry in the future. As Robin Weiss, a scientist at the Institute of Cancer Research in London, said to conclude the workshop, “We’ve seen there are still far more questions than there are answers.”

— Bob Kuska

Awards, Appointments, Announcements

The American-Italian Cancer Foundation, New York, presented its 1995 Excellence in Medicine Awards to Patrick C. Walsh, M.D., and Francesco Pagano, M.D., for their “exceptional dedication to the battle against prostate cancer.”

Walsh is chairman of urology at the Johns Hopkins Medical Institutions, Baltimore, and Pagano is chairman of urology at the University of Padua, Italy.

The foundation serves as the U.S. representative of the European School of Oncology, Milan, and annually honors outstanding American and European cancer specialists.

Hutchinson Picks Hartwell

The Board of Trustees of the Fred Hutchinson Cancer Research Center, Seattle, appointed Leland Hartwell, Ph.D., as the center’s third president and director, effective July 1. He succeeds Robert W. Day, M.D., Ph.D., who held the positions for 16 years.

Hartwell was selected after a year-long national search. Trustee Dave Lytette, who headed the search, said that Hartwell is “an outstanding scientist whose expertise, experience, leadership skills, and vision of the future of cancer research are truly exceptional.”