

Final Word on Disputed Mastectomies

Last year a great deal of fuss and publicity was generated by reports that as many as 66 women had undergone needless mastectomies as a result of a mammography screening program sponsored by the National Cancer Institute (NCI) and the American Cancer Society to detect early breast cancers.

A working group last year turned up the possible misdiagnoses while assembling data on 506 cases of difficult-to-diagnose "minimal cancers." The concluding report of the group, which was finally made public in October, contains the closest thing to the definitive word on the "66 cases."

According to the report, two of the cases were included through clerical error, so the number at issue was actually 64. The group was able to obtain additional pathological evidence on 36 of these. The pathology subgroup, headed by Robert M. McDivitt of the University of Utah Medical School, confirmed the diagnosis of cancer in 16 of the 36. That left 48 women for whom a cancer diagnosis could not be confirmed. Of the 48, 11 women who were originally thought to have cancer did not undergo mastectomies, although two of them had local excisions. The number of women who may have had unnecessary mastectomies is then reduced to 37.

Just how many women were told they had cancer when they did not have it was a question that apparently caused furious discord within the working group between pathologists and clinicians. McDivitt says cautiously that "we will never know whether we reviewed" all the pertinent material, but the pathology group apparently believed that a misdiagnosis of cancer was made in 48 cases.

The clinical subgroup, however, headed by Charles Smart, also of the University of Utah, is convinced that there were needless mastectomies in no more than six cases. Smart points out that of the 37 women who had mastectomies, 16 had their biopsies reviewed by outside consultants before the operation, and the consultants concurred in the diagnosis of cancer in all but one case. In postoperation reviews by project pathologists, the diagnosis was confirmed in 23 cases and disputed in 11 (data were not available for the remaining three). Given that six of the women, three of whom had already had mastectomies, desired mastectomies even in the face of equivocal evidence, there were very few mistakes, if any, according to Smart.

The question seems to boil down (again according to Smart) to: Who do you believe—the pathologists on the scene who had all the necessary evidence on which to base a diagnosis, or the working group which came along later and was not always able to obtain the slides on which the original diagnoses were based? Others see Smart's position as an instance of cancer clinicians defending their errors at all costs.

The adverse publicity over the mammography program and the questionable operations resulting from it has stirred up a great deal of anger and resentment among radiologists, pathologists, surgeons, and officials at the American Cancer Society. The mammography program, which has undergone major modifications since its inception in 1974, has been cited as an example of a new technology launched wholesale on the public before adequate evaluation of its safety and implications. The publicity has also highlighted the difficulties of making diagnoses in the case of very small lesions.

John Bailar, editor of the *Journal of the National Cancer Institute* and one of the first to raise doubts about the mammography program, thinks the events have taught everyone a valuable lesson. Bailar, formerly head of NCI's cancer control division, believes there is more unnecessary surgery going on than that indicated by the examination of the 66 cases. At least now, he says, "there's not a pathologist in the country who isn't aware of the difficulty in diagnosing these very early lesions."

According to the NCI, the women who were the subjects of "discrepant diagnoses" have been notified through their physicians. Bailar thinks some malpractice suits will very likely result. Smart sees no basis for any suits. "This is the most defensible group of cases I have seen," he says.

The complete report of the working group, which was headed by Oliver H. Beahrs of the Mayo Clinic, is to be published in the *Journal of the National Cancer Institute* next March.—C.H.

Second priority, Lederman says, is for "at least a minimal doubler," which might not quite reach 1000 GeV but would give "really good physics no one else can do." He has already established an outside review of the doubler project to look at the existing "game plan," and hopes to move it from an R & D footing to the status of a comprehensive accelerator plan (by fixing the design parameters) early next year. After getting enough manpower and funding into that effort, Lederman says, third priority is to consider doubler improvements that would make possible colliding beam experiments.

Given his strong background in experimental work, those who know him have no doubts about how Lederman will handle the research program. In the area of accelerator development, "he can bring in good advisers and can learn about accelerators," says a well-known colleague. "I think he will be a good director."

If there are grounds for uncertainty about Lederman's performance, they have to do with his lack of experience in administering an organization that is anywhere near the size of the 1500-employee physics laboratory. "Leon is a very good leader of a small group working in direct contact with everyone," says a physicist who has worked with him at Brookhaven National Laboratory. "In a small group he gets great rapport." Whether he will easily delegate enough authority to administer a large organization effectively is an open question, according to the physicist.

Some observers think that a number of changes need to be made in the administrative ranks at Fermilab and question whether Lederman will have the heart for such a thankless task. On this point, says one observer, "it is very tough to predict how he will make out."

The process of acclimating the new director to the laboratory and vice versa could conceivably be aggravated by the trials of weekly commuting. Even though Lederman officially spends 1 or 2 days a week there, he says that he in fact works 40 hours per week at the laboratory "out of my normal 80-hour week." Furthermore, he says that the 1 or 2 days allow for as much detail about the laboratory as he can assimilate at once; then he has the rest of the week at Nevis (which is at a beautiful site in upper Westchester County overlooking the Hudson River, on what used to be the old DuPont estate) to think seriously about the options for what is still the world's highest-energy accelerator.

—WILLIAM D. METZ