Consensus—More or Less—on the Pap Smear

A consensus panel,* convened by the National Institutes of Health to make recommendations on the use of the Pap smear in screening for cervical cancer, has concluded that the test is both safe and effective in saving lives. On the most controversial issue concerning the test, that of the frequency with which healthy, low-risk women should have the smears, the panel had trouble reaching a consensus, however. The panel report recommends that, if a woman has had two negative smears 1 year apart, "rescreening should be repeated at regular intervals of 1 to 3 years."

The annual Pap smear has long been a fact of medical life for many American women. But the need to have the smears this frequently has been challenged recently, principally on the grounds that expensive annual tests are not needed for a cancer that develops as slowly as cervical cancer apparently does (*Science*, 13 July 1979, p. 177). Studies suggest that the progression from highly localized, easily treatable disease to invasive, and potentially lethal, cancer takes up to 35 years. The Canadian program currently recommends an interval of 3 or 5 years between tests, depending on the woman's age. And in February of this year the American Cancer Society came out in favor of a 3-year screening interval for low-risk asymptomatic women.

Nevertheless, about half of the NIH panel did not find the evidence in favor of the longer intervals to be persuasive, according to panel chairwoman, Maureen Henderson. As Kenneth Noller described the situation, "We all have the same data. It is a question of interpreting them . . . a judgment call." With the panel equally divided, the members finessed the issue by recommending regular intervals of 1 to 3 years.

Raymond Kaufman summarized some of the reasons for the doubts about the longer interval. He pointed out that the incidence of both invasive cervical cancer and deaths from the disease have been declining here. This decline, the panel agreed, can be attributed to current screening programs, which in the United States feature the 1-year interval. "If something is working well," said Kaufman, "why change it until we have good evidence."

The situation in the countries where studies have shown that the longer intervals are adequate, he explained, can be very different from that here. In those countries, including Canada (British Columbia), Iceland, and Finland, the populations are more homogeneous. Perhaps more important, they have standardized central laboratories for examining the Pap smears, whereas in the United States the quality of laboratories may vary dramatically, thus increasing the likelihood of missing a cancer diagnosis on any given smear. (The possibility of such false negatives is the reason why all recommendations include the requirement that women have two negative smears, 1 year apart, before going to the longer intervals.) Moreover, early diagnosis, when the cancerous cells are still highly localized, may mean that the woman will not need extensive surgery—a hysterectomy is required for more advanced cancers—and can be treated as an outpatient.

On other aspects of screening for cervical cancer, the consensus panel had an easier time reaching agreement. They recommended that a woman have her first Pap smear shortly after beginning sexual activity. Virgins, who almost never get invasive cervical cancer, do not need the test. They further agreed that a woman who has two negative smears after age 60 could discontinue having the test because it is unlikely that she would develop invasive cancer in the remainder of her life-span. It was just the question of what to do in the time between the beginning and the end that caused problems for the consensus panel.—J. L. M.

*NIH Consensus Development Conference on Cervical Cancer Screening: The Pap Smear, held 23 to 25 July in Bethesda, Maryland. The Consensus Panel members were: Maureen Henderson (chairwoman), University of Washington Health Sciences Center; Catherine Carson, M.D., San Diego; Pelayo Correa, Louisiana State University Medical Center; Ellen Flannery, Covington and Burling, Washington, D.C.; John Frost, Johns Hopkins Hospital; Genevieve Hill, Atlanta University; Gerry Hill, Cross Cancer Institute, Edmonton, Alberta; Raymond Kaufman, Baylor College of Medicine; John Mikuta, University of Pennsylvania; Duncan Neuhauser, Case Western Reserve University School of Medicine; Kenneth Noller, Mayo Clinic; Estelle Ramey, Georgetown University School of Medicine; Ralph Richart, Columbia University; and Beverly Williams, University of Tennessee Center for Health Sciences.

The biologists in charge of the condor program say the habitat approach simply won't work. Borneman points out that civilization has already taken over large parts of what used to be condor range and there is no turning back the clock. He says designation of the Sespe-Frazier area as wilderness would not make much difference because condors have not nested there for years anyway, and if something is called wilderness it acts as a "people magnet." The telemetry and captive breeding plan is clearly an emergency, last-ditch attempt to save the species, and while it may not work it offers more promise than simple habitat protection. He says the problem with critics of the program is their "antitechnology" hang-up.

William Conway, director of the New York Zoological Society and member of the 3-year-old California Condor Advisory Panel, supports the salvage program. "The evidence to date very strongly points to extinction unless we do something pretty radical," he says. Conway says there is already ample evidence from work with related species to show that the program can work. "One of the problems people get into is they think there is something about the California condor that would make it more sensitive than any other bird," he says, but this is not true. The New York zoo has extensive experience with Andean condors, which are very similar to the California ones, including the long incubation period for eggs and the lengthy nestling period. "Our condor chicks are no more sensitive to handling than any other bird of prey chicks," he says. He believes captive breeding can be successful, judging from the performance of a pair of Andean condors, which produced 8 young in 4 years—a much higher rate of reproduction than in the wild, where, like the California bird, they only breed every other year. No California condor has yet hatched in captivity.

The bulk of scientific opinion appears to favor the condor salvage program as planned. But with investigations and recriminations now going on, it may be a while before the program is resumed. It is to be hoped that differences can be resolved expeditiously. The condor has become a powerful symbol for all endangered wildlife, and everyone agrees that success or failure in rescuing this species will have important implications for the whole conservation movement. Things must be done soon, and they must be done right. There is no margin of error for the condor. As one environmentalist said, "there are no extra condors."

—CONSTANCE HOLDEN

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