

Miscarriage risk and abortion method

Women who had abortions have been thought more likely to suffer miscarriages in subsequent pregnancies, probably because of damage to the cervix sustained during the abortion. Now, gentler methods of abortion have "virtually eliminated" these risks, say Susan Harlap and colleagues of the Kaiser-Permanente Medical Center in Walnut Grove, Calif. Harlap's results, reported in the Sept. 27 *NEW ENGLAND JOURNAL OF MEDICINE*, come from a prospective study done between 1974 and 1976. The researchers followed the pregnancies of nearly 32,000 women from the time of their first prenatal clinic visit. They collected data on previous medical and reproductive history, including past abortions.

The results showed some significant differences in spontaneous miscarriage rates in the second trimester of pregnancy in relation to previous abortions and childlessness. The miscarriage rates were higher among women who had not borne children before having an abortion, but not for women who had had children previously.

The date of the woman's abortion, Harlap found, further influenced later miscarriage risk. Childless women who underwent abortions before 1973 ran a much greater chance of having later miscarriages than did those who had abortions after 1973.

Harlap suggests that the difference can be linked to a change in abortion methods that took place around 1973. Before that, dilation and curettage was used almost exclusively, and the cervix was dilated instrumentally. The instrumental dilation process is not traumatic for women who have borne children, but can be difficult and damaging in childless women. In the early 1970s, dilation and curettage was replaced by suction, and a gentler, biological procedure took the place of instrumental dilation. Laminaria, used in the modern dilation procedure, is a kind of kelp that swells when it comes into contact with water. Placed in the cervix, it causes a gradual dilation over the course of a few hours. This process, the researchers say, may have lessened the risk of future miscarriage by decreasing the amount of damage to the cervix during the abortion.

Needles and pains

Acupuncture used alone has been tried and found wanting in the United States as an anesthetic during various operations and during childbirth. But a recent study at the University of Utah in Salt Lake City raises the possibility that electroacupuncture (in which electric current is passed through the needles [SN: 10/27/79, p. 297]) used together with a general anesthetic may reduce the amount of general anesthetic required.

Nathan L. Pace and co-workers postulated that if electroacupuncture produces analgesia, it should be reflected in reduction in anesthetic requirements for known anesthetic drugs. Ten mongrel dogs were given halothane, a general anesthetic, and electroacupuncture was applied. After the dogs were asleep, a stimulus was applied to their tails. Their response to pain was measured through muscular movements — jerking and twisting — which the researchers considered to be a positive response to pain.

Pace reported that electroacupuncture significantly lowered halothane requirements. These findings, Pace said, may encourage further studies in this country, where earlier failures have discouraged researchers from pursuing further acupuncture studies. It remains to be seen, he added, whether the results will justify the extra time and equipment needed. In Germany, there have been two clinical reports in which electroacupuncture was used as an adjunct to general anesthesia. Pace reported his findings at the recent annual meeting of the American Society for Anesthesiologists in San Francisco.

Innovative support

There's money to be made in helping entrepreneurs with big ideas and small bank accounts. At least that's the basis for Control Data Corp.'s experiment in creating inner-city business-and-technology centers. The first, which opened last May in St. Paul, Minn., has been a boon to area inventors who lack the initial managerial acumen and credit to make a go of their fledgling businesses.

Statistics show half of all new small businesses die or sell out within a year, most for lack of business know-how. Hoping to improve their odds, CDC is developing centers that rent office and laboratory space together with centrally shared facilities and services such as: clerical, drafting, accounting and legal services; a technical library with technology- and literature-search capabilities; computer hardware and software at \$3 to \$60 per hour; and computer-based continuing education. Affiliated consultants, such as university professors, even offer a percentage of their time without cost.

CDC has also obtained a charter to form a venture-capital fund. It emphasizes aid for high-technology and minority businesses. The goal is 15 centers within five years, with ones in Minneapolis, Toledo and Philadelphia due next.

News follow-ups

- Good news for endangered snakes. Their champion in the Interior Department's office of endangered species, C. Kenneth Dodd, has been reinstated after mounting pressure by Congress and a coalition of 15 national wildlife groups. Dodd was initially fired (SN: 10/20/79, p. 264) for "inappropriately" protesting the offering of a potentially threatened variety of rattlesnake at his superior's favorite French restaurant.

- The runaway offshore Mexican oil spill (SN: 8/11/79, p. 99) was tamed, not stopped — more than four months after it began — by the placement of an octagonal steel cone onto the rig. Nearly 40 feet in diameter and weighing 310 tons, the cone is limiting the flow of crude oil to 1,500 barrels per day, about 15 percent of the previous rate. Already law suits totaling \$360 million have been filed against Mexico for damage to Texas coastal property and marine life. The well, which has dumped an estimated 100 million gallons, may not be capped for weeks.

- A new cabinet-level Department of Education, with an initial budget of \$14.2 billion was created as President Carter signed its authorizing legislation.

- Donald Distler (SN: 2/3/79, p. 68) was fined \$50,000 and sentenced to two years in prison for contaminating the Ohio River and destroying a Louisville sewage-treatment plant when he illegally dumped hazardous wastes. It is believed to be the first criminal charge brought against an individual for toxic-chemical dumping; Distler has appealed the ruling.

Coming: btu budgets for buildings

Energy-guzzling homes and offices will become a thing of the past if the Department of Energy has its way. In the works are energy budgets setting the maximum allowable energy consumption for all newly constructed buildings — and even for some renovations. Expressed at btu's allowable per square foot per year, the proposed standards are expected to be issued this month with regional hearings starting in January. Final standards could be in force as early as 1981.

Written as "performance standards," the budgets will be implemented through compliance with redesigned state and local building codes. According to DOE's Archie Twitchell, energy-cost savings should pay back any additional building costs necessary to meet the standard within seven years at most.