many possible links that may break in the chain of information delivery. Most hospital laboratories send reports to both the Medical Records Department and the attending physician as a double check of notification. Computer linkage of laboratories and nursing stations could speed the transmission of test results and would be helpful if the information were accessible and stored after the patient's discharge.

Immediate telephone reporting within the hospital of positive results of microbiologic tests and selected abnormal results of biochemical tests is most appropriate. However, it is an impractical, "passing-the-buck" solution to burden busy, understaffed hospital laboratories with the responsibility of personally notifying physicians of abnormal test results. It is easier for 1 physician to telephone the laboratory than it is for someone in the laboratory to telephone 100 physicians.

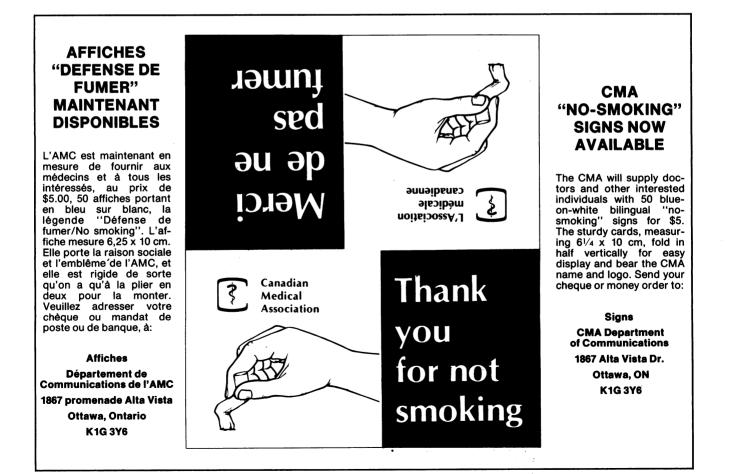
This is a difficult problem and I agree with the authors' alternative solution that all tests whose results are outstanding at the time of the patient's discharge be listed and subject to review by the attending physician.

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International Agency for Research on Cancer

r. Gerald D. Hart's article "The World Health Organization and cancer" (Can Med Assoc J 1985; 133: 269-271) provides an opportunity to emphasize the remarkable achievements of the International Agency for Research on Cancer (IARC), an organization that will celebrate its 20th anniversary in 1986. Although under the aegis of the World Health Organization (WHO), the IARC is independently funded and controlled by its contributing member states: Australia, Belgium, Canada, the Federal Republic of Germany, France, Italy, Japan, the Netherlands, the Soviet Union, Sweden, the United Kingdom and the United States. Canada was the last member to join, in 1982, and negotiations are in progress to extend the membership to other countries with the scientific potential to contribute to the research on cancer.

In spite of its relatively modest budget (\$11.4 million for 1986) and limited number of staff (150), IARC has shown an extraordinary scientific productivity and has initiated studies and published health evaluations that have won worldwide acclaim. This excellence would be unusual in a national institution but is remarkable in one beset by all the problems of living within the United Nations' bureaucracy.



Two tenets have stood the agency in good stead: to hire the best available scientists and to allow these scientists, through laboratory and field studies, to fulfil their aims as practical scientists.

IARC has concentrated its activities on investigations that can best be conducted internationally. These comprise three main elements: epidemiology, evaluation of chemical carcinogenicity, and education. Epidemiologic studies, both descriptive and analytic, have led to preventive strategies against cancer. It would not be possible for most countries to find the cohort numbers and geographic distribution required. The ability to use the same experimental protocol for a study ranging over many countries is particularly valuable. The publication "Cancer Incidence in Five Continents"¹ has become an obligatory reference for any study of the geographic incidence of tumours. The work in such areas as cancer incidence, diet and cancer, and cancer in relation to radiation treatment possesses the objectivity and range that can only be achieved through international cooperation.

IARC has evaluated the scientific information about the carcinogenicity of environmental chemicals for many years. Its monographs on the evaluation of the carcinogenic risk of chemicals to humans, which now cover over 650 compounds, serve as the most authoritative source on the carcinogenic potential of chemicals. These evaluations are used throughout the world by regulatory authorities and are invaluable because they bear the imprimatur of objectivity and scientific excellence.

In its educational role IARC provides fellowships, training courses and specialized monographs (e.g., on biostatistical techniques). Once again the international aspect makes this contribution unusual.

Canadians have fully participated in all these activities, and our scientific community and government agencies have benefited enormously from our membership in IARC. It has been my privilege to serve, with my admirable colleague Dr. René Simard, of the Montreal Cancer Institute, as Canada's representative to IARC's Governing Council.

> Emmanuel Somers, PhD Director General Environmental Health Directorate Health Protection Branch Department of National Health and Welfare Ottawa, Ont.

Reference

1. Doll R (ed): Cancer Incidence in Five Continents; a Technical Report, International Union against Cancer, New York, 1966

Gastroplasty and breast cancer

n the last year I have seen three women in whom breast cancer developed within 12 to 30 months after gastroplasty for weight reduction.

Case 1

A 31-year-old woman presented with a mass 15×15 cm in her right breast that she had first detected nearly 1 year earlier. She had had a gastroplasty 30 months previously and had lost 30 kg. Her present weight was 58 kg. A biopsy and subsequent mastectomy showed that the entire breast parenchyma was involved by tumour, as were all the lymph nodes, which were matted together. There was no involvement of the skin, nipple or resection margins. Bone and liver scans were normal. The tumour had an estrogen receptor value (amount of estradiol specifically bound) of 28 fmol per milligram of tumour cytosol protein and a progesterone receptor value (amount of progesterone specifically bound) of 18 fmol/mg. Management was to consist of two courses of adjuvant chemotherapy separated by a course of radiotherapy for the chest wall and lymph nodes. Within 2 months of the start of chemotherapy, however, metastases developed in the mastectomy scar and in the right sixth rib.

Case 2

At a breast screening clinic a 55-year-old woman was found to have a mass 1.5 cm in diameter in her breast; it was classified as a stage I, hormone-receptor-positive tumour. One year previously she had had a gastroplasty and had lost 25 kg. She received no therapy beyond mastectomy.

Case 3

A 34-year-old woman who, 2 years previously, had had a gastroplasty and lost more than 25 kg was found to have a mass the size of an orange in her right breast 1 year after the surgery. The mass was removed, and she was given chemotherapy. The tumour recurred 4 months later. She then underwent a modified radical mastectomy; 9 of 11 lymph nodes were involved by tumour. The residual tumour mass was $5 \times 7 \times 9$ cm, and the tumour was negative for estrogen and progesterone receptors. She was treated with a different chemotherapy regimen. However, the disease recurred in her bones, liver and left breast. She was subsequently lost to follow-up.

Comments

A literature search did not reveal any association of gastroplasty with breast cancer. Initially I thought that the tumours were more visible because of the gastroplasty and subsequent weight loss, but with the advanced stage of two of the three cases this appears to be an oversimplistic view.

I am interested in knowing if anyone else has had similar experience.

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