

tive females. In phenotypic, sex-chromatin-positive males, according to Gardner, smears negative for the Y body would detect XX males or persons with hermaphroditism or pseudo-hermaphroditism.

We agree, of course, that both types of test will not permit detection of autosomal aberrations or Robertsonian translocations. In these cases the only method enabling one to make a diagnosis is full karyotypic investigation with the use of present-day techniques of chromosomal study.

Since we cannot, for financial and organizational reasons, conduct full chromosomal studies in all patients, our routine procedure to establish indications for full studies is, first, to perform full X- and Y-body tests and, second, to assess the clinical status of the patient. A number of serious clinical features allow one to discount a cytogenetic basis for disorders of reproductive function, as in such conditions as Stein-Leventhal syndrome, anorexia nervosa, hypothalamosis post graviditatem, primary hypopituitarism, acquired adrenogenital syndrome and premature cessation of ovarian activity.

We have also encountered cases in which the cause of disorders of reproductive function cannot be explicitly demonstrated by clinical studies and the results of X- and Y-body tests are normal. In our opinion full chromosomal studies are indicated in these cases.

Our experience in the use of the X- and Y-body tests has convinced us that they are valuable clinical tests that can be recommended as preliminary genetic studies, particularly in small endocrinologic centres and in neonatology departments.

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Breast-feeding by mothers positive for HB_sAg

To the editor: Feinman and colleagues (*Can Med Assoc J* 115: 991, 1976) have put forward some practical guidelines that should prove helpful to

health care workers dealing with patients who are positive for hepatitis B surface antigen (HB_sAg).

We think, however, that the authors may be unnecessarily restrictive when they advise that HB_sAg carrier mothers should avoid breast-feeding. Their caution is probably based on evidence that HB_sAg has been detected in the breast milk of a carrier mother¹ and the experimental demonstration that serum containing HB_sAg is infectious by the oral route.² Feinman and colleagues themselves point out that, "although HB_sAg may be present in various biologic fluids, no objective evidence supports the hypothesis that these fluids are indeed infectious"; this seems inconsistent with their recommendation concerning breast-feeding. The only publication to our knowledge that has presented data specifically relating to breast-feeding and vertical transmission of hepatitis B concluded that there was no correlation between breast-feeding and the development of antigenemia in babies of carrier mothers;³ the same authors assayed unconcentrated samples of breast milk from 32 breast-feeding carrier mothers (10 of whose babies had become HB_sAg carriers) and reported that all specimens were negative for HB_sAg by radioimmunoassay. The fact that this study by Beasley and associates was conducted in Taiwan, where HB_sAg is found in 15 to 20% of the general population and persistent antigenemia develops in approximately 50% of babies born to symptom-free carrier mothers, should not be grounds to dismiss the importance of their observations.

We believe that, on balance, the benefits of breast-feeding to the health of an infant far outweigh the theoretical increased risk of acquiring antigenemia from an HB_sAg carrier mother through ingestion of infected breast milk. This is particularly important in native Indian and Inuit populations in which there may be an unusually high prevalence of hepatitis B.^{4,5}

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Low back pain in workmen

To the editor: Recently in the *Journal* (115: 901, 1976) Dr. A. Kertesz reported on evaluation of 50 cases of low back pain, one half of which were cases of the Workmen's Compensation Board of Ontario (WCBO). In the article it was stated that there are "about 12 000 claims" accepted per year by the WCBO. In order to place the data in proper perspective the following information may be of interest.

In 1975 there were 48 839 low back injuries reported to the WCBO; 32 952 were severe enough to cause absence from work for varying intervals. In 403 cases major surgery of the spine was performed in the same year in which the injury had occurred. There was a carryover from previous years, and a total of 1095 major surgical procedures on the spine were carried out during 1975 on WCBO patients.

Currently we estimate that 90% of patients with low back injury who are absent from work before operation are able to return to work within 13 weeks. This means that we are encountering a potential of 3300 cases of chronic low back disability per year. This is in part reflected in the preponderance of cases of back injury treated at our hospital and rehabilitation centre in Downsview. During 1975, 47% of all patients discharged from the hospital were suffering from low back disability; this represents 2745 patients treated at the hospital at an estimated cost of \$2.585 million.

I trust that these figures will place the magnitude of the problem in perspective.

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To the editor: The information Dr. McCracken provides is indeed of interest. The number of cases we mentioned in our article came from the 1966 figures obtained by Dr. A.W.M. White (reference 1 in our article: *Can Med Assoc J* 95: 50, 1966). Dr. McCracken's estimate that 90% of patients with low back pain severe enough to cause absence from work recover within 13 weeks is the same as the estimate of 10% having prolonged disability quoted by White.

The difference in numbers between the old data and the new could be the result of differences in terminology as to previous numbers of cases — those accepted by the Workmen's Compensation Board and those reported to the board. Perhaps we were not quoting comparable figures. At any rate, Dr. McCracken's figures are interesting and help provide up-to-date information about the magnitude of the problem.