industry practices to the public, a further sign, perhaps, that there are chinks in the protective wall that surrounds many Japanese professional and business activities. The problem with the guidelines, of course, is that they are only that, a mere suggestion to discourage shady transactions, without provision for penalties. Critics maintain that drug companies will have to be closely watched for guideline compliance and that some clauses are far too diffident to physicians and medical organisations. Still, the guidelines seem a step in the right direction since they detail ways in which payoffs to doctors have been made, and how to avoid similar actions in the future. Excessive amounts of money, for example, have been given to doctors conducting clinical tests, ostensibly to promote the claims of drugs under development. Doctors, too, have solicited large sums of money from pharmaceutical companies where clinical test results can determine success or failure of a drug under research and development—a costly investment. Before a new drug is approved for use, the Central Pharmaceutical Affairs Council (within the Ministry of Health and Welfare) must examine results of toxicity tests, animal tests, and clinical trials. All these tests are done at universities or research organisations at the request of pharmaceutical companies—one explanation why research commissions have appeared prominently in bribery cases.

Ultimately it is the Japanese patient who may have to pay a heavy price for such underhand dealings. On May 20 the chairman of Nippon Shoji Kaisha Ltd stepped down to publicly take responsibility for insider trading among employees and, even more seriously, for the sale of sorivudine, which has so far killed 15 people (see *Lancet* 1993; **342:** 1166). The company, Japan's fourth largest pharmaceuticals wholesaler, announced that it has already reached settlements with families of more than 10 of the 23 people who either died or suffered from serious side-effects due to its drug.

Heightened scrutiny is also evident in moves to create a better-coordinated system to monitor hospital quality. The Ministry of Health and Welfare and several non-governmental groups are undertaking a closer look at private hospital care, using as a model the non-profit hospital monitoring organisations that have existed in the United States for more than 40 years. A committee to review Japan's hospitals was formed last year by the Health Ministry, which now intends to issue guidelines on how monitoring organisations should work. One rationale is that as patients become more discriminating they will begin to question medical care: a next step may well be the development of standards for evaluating clinical medicine in Japan.

Hospitals were again in the news when an *Asahi Shimbun* editorial blasted Japan's "scary psychiatric hospitals", demanding that the government immediately make public those hospitals that have no "designated" psychiatrists—ie, those recognised as having sufficient clinical experience as well as training in human rights. There are some 8600 such practitioners. Press criticism was prompted by coverage of a private hospital where a weeping female patient was rendered unconscious by injection and then locked up. The facility in question had no designated psychiatrist and the death rate of inpatients was found to be unusually high. The incident is not considered an exceptional case. In addition, hospital admissions of older people with dementia and children or teenagers with "school phobia" are on the rise.

The call for the Health Ministry to establish stricter standards for psychiatric institutions may be one way to improve treatment of the mentally ill, as will making public data on individual hospital staff and treatment policies. Here, too, transparency of information is the key.

Catrien Ross

Transmission of hepatitis C via anaesthetic tubing?

A preliminary investigation into the likely patient-to-patient transmission of hepatitis C at a private hospital in Sydney, Australia has found that the infections probably occurred via anaesthetic tubing, according to the New South Wales Health Department.

In December last year the department was notified that two patients had presented with acute hepatitis C five weeks and seven weeks after undergoing minor surgical procedures in the same operating session at the hospital. Further investigation revealed that three more people who underwent surgery during the same session and one person operated on the previous day were hepatitis C antibody positive. All staff associated with the operating theatres on the days in question were anti-hepatitis C virus (HCV) negative. The five people infected on the index day had HCV genotype 1a, while the patient treated on the previous day was found to carry HCV genotype 3a.

Because of the varied nature of the procedures involved, the investigation ruled out any passage of HCV by surgical equipment. The chance of there being five previously infected patients on the one day was estimated to be $2{\cdot}5\times10^{-10}$. The only common factor between the five patients infected is that they all had been given general anaesthetic with a laryngeal mask.

The investigation put forward two hypotheses. One is that the virus was passed on through the anaesthetic agents, but in view of the size of the vials used, and the necessity to use at least three vials between the five patients, this was judged extremely unlikely.

The favoured hypothesis is that the first patient on the index day, who had some risk factors for hepatitis C infection, was already infected. He "may have coughed at some stage during the procedure, introducing respiratory secretions into the reusable part of the anaesthetic circuitry. This would have then acted as a reservoir for the virus, which could have been transmitted to other patients as droplets via minor breaks in their oropharyngeal mucosa", the report says.

The New South Wales' department's chief health officer, Dr George Rubin, said that no case of transmission via anaesthetic circuitry has been reported in the international literature. He also noted that filters were not used on the anaesthetic circuitry, in contravention of Health Department policy. However, private hospitals have no legislative requirement to follow departmental policy.

The result of the investigation has been greeted with the some scepticism by the medical profession. Doubts have been expressed over the ability of hepatitis C to be spread by droplet infection. Questions have also been raised over the propriety of the Health Department making, in effect, a diagnosis by exclusion on the basis of circumstantial evidence. Critics point out that there is no evidence of hepatitis C virus being found on the anaesthetic tubing and that, without that, all else is little more than informed speculation.

Mark Ragg