benefits of obviating unnecessary thoracic surgery are obvious, and as more clinicians are becoming aware of the diagnostic accuracy of percutaneous needle biopsy the technique is becoming established as one of the mainstays of diagnosis in chest disease.

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Dealing with the Disadvantaged

Communicating with patients with a language problem

JANET THRUSH

When the dysphasic patient enters your surgery or clinic, there may be no immediate indication that there is anything wrong with his speech. Frequently used phrases such as greetings and responses to questions such as "How are you?" often remain intact even if the patient has a considerable problem in using and understanding speech. Alternatively,

comprehension may be almost normal but the patient unable to say more than a few words, and those not always appropriately. In spite of this wide variation, a few rules for the doctor can help every patient to make the maximum use of his ability to communicate.

(1) Talk slightly more slowly than you would normally, for the same reason that it is easier to understand a foreign language if it is spoken slowly.

(2) Use simple direct sentences without complicated syntax.

(3) Do not "talk down" to the patient.

(4) Do not use "either . . . or" questions—for example, "Do you still live with your daughter or are you on your own now?" Ask each part of the question separately.

(5) Do not rush to finish sentences for the patient; give him time.

(6) Use other clues to help the patient understand, especially when changing the topic—for example, point to the diary when discussing a further appointment.

(7) Reduce extraneous noise by closing windows and doors;

the dysphasic person often finds it difficult to focus on the sound of speech against a noisy background.

(8) Pay attention when the patient is searching for words; if you fill in the gaps by clicking a Biro or looking through the notes he will be unable to concentrate.

(9) Lip-reading sometimes helps dysphasic patients, so make sure you are in a good light, facing the patient, and keep your hands away from your mouth when you speak.

(10) If a relative is present do not leave the patient out and talk only to the relative; this is insulting. If it is necessary to talk mainly to the relative in the patient's presence, apologise to the patient. It is significant that the physically handicapped felt sufficiently strongly about this to call their radio programme "Does he take sugar?"

(11) Do not underestimate the patient's ability to understand; an amazing amount can be gleaned from expression, vocal tone, and the occasional comprehended word. This is particularly important on ward rounds. Much distress is unnecessarily caused by nursing and remedial staff underestimating comprehension.

(12) Keep the atmosphere relaxed whatever the pressures on your time; even normal speakers tend to forget words when they feel harassed.

(13) Important instructions should be put into writing; dysphasic patients, even those who have good speech, often have difficulty in retaining new information.

(14) If an eye test has to be given it may be helpful to know that most patients can match similar letters, even when they are unable to say or write the correct one.

(15) Make sure that the receptionist is aware of the existence of dysphasic problems so that when she is faced with someone searching for words or using words inappropriately, yet possibly swearing fluently, she will not assume that the patient is either drunk or in need of sectioning.

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(16) The receptionist can also help by fixing future appointments for a time when the clinic or surgery is quietest, and by putting the appointment time and any other instructions in writing.

Mental handicap

Most of the points that apply to dysphasic patients can usefully be remembered when dealing with the mentally handicapped, especially the following.

- (1) Use simple sentences, but do not "talk down."
- (2) Put instructions in writing; there will usually be someone in the patient's environment who can read.
- (3) Both truculence and shyness are often due to being in an unfamiliar environment, so putting the patient at ease achieves better communication.
- (4) There is an increasing use of sign language among the mentally handicapped attending centres and in institutions. If your patient starts making strange gestures he may well be trying to communicate.

Pollution and People

Contamination of food: mycotoxins and metals

DAPHNE GLOAG

Contamination of food is both more and less of a problem than in the past. There is clearly more pollution by extraneous substances—notably heavy metals and residues of agricultural chemicals—but at the same time better methods of storage and preservation have reduced the prevalence of toxins from natural sources. In the former case too the extensive surveillance¹ of foodstuffs by more refined analytical techniques is tending to raise standards. The fact that the incidence of gastric cancer is falling in Western countries possibly reflects a reduction in the carcinogens, natural² and otherwise, that are ingested in food.³ But the very existence now of more sensitive methods for detecting contaminants makes for more awareness of the problems—and raises questions about thresholds of activity. Of the many possible topics, I discuss mycotoxins, mercury, and cadmium in this article (having already touched on lead in food—3 January, p 41); in the next one I will take a brief look at some chemicals.

Mycotoxins

The convulsions and hallucinations, dancing mania, and finally gangrene of "St Anthony's fire" or ergotism are probably the most terrifying manifestations of the contamination of food. It was a common epidemic disease in the tenth and eleventh centuries and occurred in Provence as recently as 1951⁴; it was due to alkaloids—of which LSD is one—produced by the ergot fungus, *Claviceps purpurea*, on rye. Ergotism is of interest as the earliest known disease produced by fungal toxins (the connection was recognised in the 1850s). A few local outbreaks of other mycotoxicoses were reported earlier this century,⁵ but the subject really came to notice in Britain when in 1961 hundreds of thousands of turkey poults and ducklings died after receiving feeds containing Brazilian groundnut meal. Soon the toxin was isolated and named aflatoxin after the fungus *Aspergillus flavus*, and was found to be carcinogenic in rats.⁶ Its toxicity and

carcinogenicity for the liver and sometimes other organs have since been shown in a wide range of animals.⁷⁻⁹ There is less direct evidence that aflatoxin is toxic and carcinogenic in man.⁵⁻⁹

Woodcut of St Anthony with a victim of "St Anthony's fire" (ergotism); the "fire" refers to the tingling in the limbs. From H von Gersdorf, *Feldbuch der Wundtartzney*, Frankfurt: 1551. Reproduced by courtesy of the Wellcome Trustees.

Aflatoxin is the most widely studied mycotoxin but several others are known to cause disease in man.⁵⁻⁹ Fungi can grow on almost any plant product so there is great scope for contamination of food by mycotoxins given appropriate conditions. The strains of the two *Aspergillus* species producing aflatoxin are ubiquitous; but it needs hot, humid conditions during crop growth, harvesting, or storage for its production. Ochratoxin (a common contaminant of cereals and many other foods) can be produced by some species of *Penicillium* at