first in a small scheme—to catch the patients, many of whom find travel to the surgery difficult or have young babies to contend with, at the moment they are most willing to follow the doctor's suggestions. The slide can be marked and put in a multi-holder in fixative then and there, and can safely stay there for several days.

It seems to us that the position of the general practitioner in any future survey is obvious. Only he can explain the purpose, importance, scope, and limitations of the smear test to each individual patient in the way that that particular patient understands best; and only he can explain any positive result in a way that will not cause alarm to the patient or her family. We contend that slide-taking is no great trouble—and, with minimum organization, takes little time—and that our patients are far happier to have us doing it than to go to some strange centre, however efficient, where there is no understanding of their family background. We have come across several families, in which for socio-economic and other reasons the mother must be considered most at risk, where we have deliberately delayed taking or suggesting a slide at a time when one more worry would be literally more than that woman could bear. We remain convinced that this is general practitioners' work and that it would be positively dangerous to let it go elsewhere.

In this survey the slides were stained and screened by one of the partners, since the local hospital laboratory has not yet got the facilities for screening the general population. It has recently been emphasized that, if screening of the population is to become general, full-time technicians in properly equipped laboratories must do the bulk of it, with referral of doubtful slides to a specialist pathologist. This must undoubtedly be the eventual scheme, but McLaren (1963) has wisely pointed out the pitfalls of full-time screening as a sole occupation. There will be days when the technician is feeling unwell or bored, and on these days he is the last person suitable to screen a whole collection of probably normal slides. Apart from this, there must come a time when screening as a whole-time occupation becomes frankly dull. Obviously there are dangers in employing too many people part time, but in our present small series the factors that play the greatest part in making routine screening of slides positively enjoyable

are the ability to do it at one's own speed in one's own time, and knowledge of the patient whose name is attached to the slide. This last factor gives relevance to the whole scheme and adds much interest to each slide. For these reasons and others we feel that there will be a place for keen amateurs in any large screening project.

Lastly, if a whole population is to be screened, advertising must be most carefully thought out and planned in order to emphasize the importance of the test and yet avoid frightening people too much. Among the majority of the population cancer is still thought of as totally incurable, and there is little difference in popular thought between the very early stages, which offer at least a prospect of complete eradication, and the later more hopeless stages. Mass cancerphobia is unlikely in Britain, but this does not mean that individual misapprehensions and misunderstandings must not be dealt with most carefully and gently. We began our screening service a little worried that mass education in regular screening was ahead of the services to back it up, but we are now more concerned at public apathy than over-keenness.

Summary

A survey in general practice revealed that of 1,100 women who saw posters offering cervical smears only 40 (3.7%) asked for the test to be done.

Smears should be taken during normal surgery hours, as patients are reluctant to attend a special session.

Advertising should be designed to emphasize the importance of the test while avoiding frightening patients.

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Medical Memoranda

Melkersson's Syndrome

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Melkersson's syndrome is characterized by the association of a congenitally fissured tongue (lingua plicata), recurrent facial nerve palsies, and recurrent inflammatory swelling of the face leading to scarring and deformity.

The first reference to this triad of symptoms was made by Rossolimo (1901) in the case of a woman who also suffered from migraine, and he related the facial paralyses to the headaches by analogy with ophthalmoplegic migraine. Melkersson (1928) reported the association of recurrent facial paralyses and "angioneurotic oedema" in a 35-year-old woman, but he did not refer to the appearance of the tongue. Rosenthal (1930) noted the familial occurrence of some or all of the elements of the triad in two of his patients. The eponym was conferred upon the syndrome by Ekbom (1950) in memory of his compatriot, who died at an early age.

CASE REPORT

A widow, born in June 1900, had no family history of facial weakness, abnormalities of the tongue, or migraine. She had lived all her life in an industrial area. From childhood she had suffered from migraine at infrequent intervals. In young adult life she had first recognized that she had a "spongy tongue."

At the age of 13 years she had developed a painless weakness of the right side of her face which had cleared up completely within a few months. Similar episodes of unilateral facial weakness occurred when she was 19 years old and 27 years old, but she could not remember which side was affected. Recovery on each occasion was complete.

In November 1953 she had again developed a right-sided facial paralysis accompanied by some impairment of taste. About seven months later she developed a left-sided facial palsy, and recovery from these two episodes was incomplete.

In 1963 she started to have recurrent swelling of the lower lip which would develop suddenly overnight and persist for two weeks or so. At first the swelling was painless, but within a few days the swollen and protuberant mucosa of the lip would break down, leaving painful fissures and ulcers. The attacks followed each other at intervals of four to eight weeks, and, as each one subsided, it left

some residual swelling so that the lower lip became permanently enlarged. The upper lip and the gums were not affected.

On examination she was a well-covered, grey-haired woman. The lower lip was uniformly swollen and protuberant and was traversed by two painful fissures. The scars of old ulcers could be seen on the everted mucosa of the lip. The skin over the chin was puckered and fasciculation was seen. The skin was not discoloured and the contours of the upper lip and the rest of the face were normal. The tongue was deeply fissured in an irregular mosaic, but the fissures were so narrow that they were not readily visible unless the tongue was protruded and gently dried with gauze (see Fig). There was no adenopathy.

Dorsum of tongue showing deep congenital fissures (lingua plicata).

In the nervous system there was no anosmia. She had a high myopia, but the fundi were otherwise normal. External ocular movements were full and there was no nystagmus. Hearing was normal. In the cranial nerves the abnormalities were confined to structures innervated by the facial nerves. All movements of the right side of the face were weak. There was complete paralysis of the perioral muscles on the left side and severe weakness of the remaining facial muscles on the left, but she was able to close her eyes. She was able to identify salt and sugar placed on the tongue and palate, but there was an appreciable delay in recognizing these substances over the left side of the tongue. She was unable to dissociate movements of the lips from those of the eyes due to faulty reinnervation of the facial nerves. The remainder of the nervous system was normal and there was no abnormality in the other system.

Results of routine examination of the urine, blood, and cerebrospinal fluid were normal, as were radiographs of the skull and chest. The Mantoux reaction was positive at 1:1,000.

On treatment with systemic prednisolone, 10 mg. daily, no significant improvement occurred, and this treatment was discontinued after two months. Subsequently, some improvement in the painful fissures of the lower lip was associated with the use of local hydrocortisone lamellae, which were allowed to dissolve in the buccal sulcus.

COMMENT

Fissured tongue is a congenital abnormality which has often been observed by patients in childhood long before the onset of the facial swelling or paralysis, and is not attributable to the effect of scarring. Cockayne (1933) regarded fissured tongue as a hereditary condition which was transmitted in a dominant manner with incomplete penetrance.

Out of 12 patients with recurrent facial nerve palsies Ekbohm (1950) found an obviously fissured tongue in three, while in 91 patients with an isolated Bell's palsy he found only one obviously fissured tongue. He concluded that congenital fissuring of the tongue was associated with a predisposition to recurrent facial palsies.

The facial paralysis of Melkersson's syndrome is indistinguishable from Bell's palsy in its onset and course. Barley (1960) has found that the microscopic appearance of the nerve at operation for decompression is identical in the two conditions, the upper portion of the descending part appears oedematous and swollen, while the lower portion is atrophic.

Biopsy of the facial swelling has in many cases revealed infiltration of the subcutis with endothelioid cells and giant cells without caseation. Acid-fast bacilli have never been demonstrated. The clinical and pathological appearances are identical with Meischer's cheilitis granulomatosa and it is generally considered that this condition is an incomplete form of Melkersson's syndrome (Findlay, 1954). In one case biopsy of the cervical lymph node showed the same granulomatous infiltration (Hering and Scheid, 1954).

The cellular infiltrate is very suggestive of sarcoidosis and there is also a clinical similarity between the two conditions in that the facial paralysis, often bilateral, is one of the commonest neurological manifestations of sarcoidosis (Colover, 1948). Recurrent facial palsies have not been described in sarcoidosis, but Symonds (1958) has reported a 27-year-old woman with recurrent cranial nerve palsies in which the facial, abducent, oculomotor, and vestibular nerves were separately and singly affected over three and a half years. The spleen was enlarged and biopsy of subcutaneous nodules yielded a microscopical picture consistent with sarcoidosis or non-caseating follicular tuberculosis. It would be tempting to regard Melkersson's syndrome as a form of sarcoidosis in which the facial tissues and their nerves are peculiarly susceptible because of hereditary factors of which lingua plicata is a manifestation, but there is at present no firm evidence to support this point of view.

Other aetiological clues are provided by the occasional report of familial Melkersson's syndrome (Scott, 1964) and the association with vascular abnormalities such as migraine, chilblains, or erythrocyanosis crurum.

Treatment with systemic steroids has been disappointing, but local hydrocortisone may be of value. Antibiotics were effective in Scott's patient in reducing the acute swelling of the face, but did not appear to prevent further recurrences.

Awareness of the triad of recurrent facial palsies, recurrent inflammatory swelling of the face, and fissured tongue leads to the correct diagnosis when all these features are present. A fissured tongue, however, may easily be missed. The depth of the fissures is often only revealed after drying the dorsum of the tongue with gauze and then bending the tip downwards. As is illustrated in this patient the development of cheilitis may occur as long as 50 years after the first episode of facial palsy. If a patient develops a Bell's palsy during the second or third decade of life and has evidence of a fissured tongue one would hesitate to give an unequivocally good prognosis.

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