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Cytology and the General Practitioner

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Despite publicity in the popular press and radio over the last few months, many general practitioners have been surprised at how few of their patients have demanded a cytological smear test for the detection of cervical carcinoma-in-situ.

In the following survey an attempt has been made to gauge the response of patients to a free, easily available cytological screening service for uterine cancer, and to classify the findings, microscopical and macroscopical, as well as public attitude. The population to whom this service was offered constituted the 20-to-80-year age group of female patients of one general practice in South-east England during the months from June 1964 to December 1964. All slide-taking, staining, and microscopy was undertaken by the two partners concerned in the study, one of whom (T. R. C.) had had the necessary training for slide screening. Doubtful slides were referred to Dr. E. Wachtel, of Hammersmith Hospital, who kindly offered to be referee.

Purposes of the Study

The purposes of the study were as follows: (1) to gauge public enthusiasm, apathy, and fear, and to try to correlate these with the socio-economic groups of the patients concerned ; (2) to screen as many women as possible, and to get as many as possible used to accepting the smear test as a regular three-year one ; (3) to record any incidental microscopical and macroscopical findings and to offer treatment where necessary ; (4) to try to assess the role of the general practitioner in any future survey.

Practice Population

The practice is basically a mixed urban and rural practice, involved in light industry, farming, and commuting to work in London. It also includes a growing housing estate with a considerable number of young families from London on an "over-spill" plan. The total number of patients is about 6,000, predominantly working class ; of this number there are 1,984 women in the 20-to-80-year age group, and it is of these that the survey is made up. Table I shows the approximate socio-economic grouping of these women.

Because of the wide range of ages these figures obviously show a fair number of poor, elderly people, some of whom are

bed-ridden or confined to their homes ; and Group V is perhaps larger than a country-wide survey would reflect, because of the existence in the neighbourhood of a large gipsy camp.

TABLE I.—Approximate Socio-economic Grouping of Women in 20-to-80-year Age Group

Socio-economic Group	Number of Women (20-80 years)	Approximate % of Practice
I (upper-middle class and professional)	43	2.0
II (lower-middle class, clerks, etc.)	286	15.0
III (literate, skilled artisan, regular readers of women's magazines, etc.)	1,278	64.0
IV (unskilled working class, infrequent readers)	347	17.5
V (totally illiterate)	30	1.5
Total	1,984	100.0

Organization of Survey

A small, unalarming but very easily noticed poster explaining the importance of the test and announcing its availability was put up in the waiting-room of each of the two surgeries in the practice at the end of May 1964. (This happened to coincide with a mild surge of interest in vaginal cytology in some of the popular women's magazines.) The wording of the poster was as follows:

"Two thousand five hundred women die every year in Great Britain from cancer of the neck of the womb. Yet this disease is now almost totally preventable by a quick, simple, painless test repeated at two- or three-year intervals. We are now in a position to offer this test free to all our female patients, and you are most earnestly advised to think about this. Please ask the doctor for more information."

Without any doubt most of the patients in the waiting-rooms saw the posters or had them pointed out to them by friends. It has been estimated, from a random sample of 400 record cards, that about 55% of patients in the age group involved visited the surgeries, and therefore came into theoretical contact with the posters, during the period of the survey—June to December 1964.

For the purposes of the survey those patients who had slides taken were divided into four categories:

A. Those who asked, entirely spontaneously, for the test to be performed as a result of reading the posters (plus a very few—about four—who had asked before the scheme began).

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B. Those who were being examined for gynaecological or obstetric reasons and who had it explained to them that the test was available and should be done. (Two refused—both from socio-economic group IV.)

C. Those who were considered to be particularly at risk, to whom a slide was proposed as part of a general examination, but whose initial complaint had no possible gynaecological significance. (Four refused, one from socio-economic group III, two from group IV, and one from group V.)

D. A few patients taking or starting oral contraceptives.

Table II shows how these categories fall among the various socio-economic groups.

TABLE II.—Distribution of Test Acceptance According to Category and Socio-economic Group

Socio-economic Groups	Category			
	A	B	C	D
I	6	3	1	0
II	13	11	13	1
III	17	51	35	6
IV	3	10	15	0
V	0	0	0	0
Total accepting test ..	39	75	64	7

Method

Almost all slides were full cervical scrapes using Ayre's spatula, implying that almost all the cervixes were carefully visualized. A very few patients were virgo intacta and a vaginal pool specimen was taken in these cases.

Fixation was with alcohol and ether, and staining was a modification of Papanicolaou's original technique (using methylene blue, orange G., and E.A. 36). All the microscopy was done by one of us (T. R. C.) and results recorded and filed with the slides for future reference.

Results

General Results

Chance findings, mainly asymptomatic, during the seven-month period included:

Macroscopical Findings	No. of Cases
Clinical vaginitis	26
Large cervical polyps	3
Cystocele, rectocele, etc.	2
Cervix bleeding easily on touch (otherwise clinically normal)	12
Erosions	10
Microscopical Findings	
<i>Trichomonas vaginalis</i>	3
<i>Monilia</i>	9

These various conditions were dealt with as they were seen, with reference to hospital where necessary. Apart from this, five of the slides were considered to be in Class III to IV, even to the point of dyskaryosis. Four of these were repeated—two were considered clear and the other two suspicious enough to warrant referral for biopsy. On both occasions biopsy proved negative. (The fifth Class III to IV smear has yet to be repeated.)

Clinical and Microscopical Results

There were no positive slides found during the survey but the total numbers were small. Most authorities give 0.5% as a probable positive finding in population screening, and Yule and Cameron (1961) found positive smears in 1.2% of patients attending a gynaecological out-patient clinic.

Of the 190 patients investigated five had doubtful smears, of which four were repeated, and, of these, two were referred for surgical opinion, and negative findings were later confirmed at biopsy.

Apart from this, 26 cases of vaginitis and 10 erosions were treated. Five patients were referred for surgical opinion for other chance findings, such as stress-incontinence, etc.

It is interesting to note that 12 clinically and cytologically normal cervixes bled on light touch.

Response of Patients

Of approximately 1,100 women who supposedly came into direct contact with the posters only 40 (3.7%) asked spontaneously for the test to be done. This we regard as a poor result, especially as only a small number came from the socio-economic groups probably most at risk. This poor response must represent a basic inability to translate the general wording of a poster into a personal message. In fact, many of those who did not ask spontaneously were obviously glad when the suggestion was made to them that the slide should be included in a general or particular examination about to be carried out.

In the seven months of the survey 190 patients had slides examined—or just over 17% of the female patients between 20 and 80 years of age visiting the surgery during that time. This seems a small "catch," but it is partly accounted for by a large number of elderly poor people in the practice, who, though regular visitors to the surgery, would be confused and worried by a new technique directed at discovering a disease they had never consciously related to themselves.

Discussion

In 1963 Dr. Elizabeth MacGregor and Sir Dugald Baird reported a large-scale survey designed to screen a proportion of the "well-woman" population of Aberdeen, and with the help of a circular letter and follow-up by a health visitor succeeded in reaching a fair proportion of those approached. Our own small survey has been an attempt to repeat their fine results in a single practice and to find the part the general practitioner should play in what must eventually become a routine investigation.

The Aberdeen survey was limited to the age groups from 25 to 65 and did not include pregnant women. We considered in our practice that to make any limitation at all would be to restrict in some way our attempt to introduce the smear test as a popularly accepted routine, and, though the chances of finding carcinoma-in-situ under the age of 25 years are small, we have at least that many more ambassadors in the lower age groups as well as their grandmothers at the other end. Probably, however, when the test is to be carried out on a community-wide basis, economics will dictate that at first it must be limited to the ages that are at risk.

We deliberately refrained from advertising the test outside the consulting room either by word of mouth or by letter, as was done in Aberdeen. This, we thought, would enable us to gauge the response to visual stimulation in the form of a poster alone; the result was frankly disappointing. MacGregor and Baird found a very significant difference between the general practice where active co-operation of the doctors was sought and those in which no "plugging" by the practitioners was used; and, undoubtedly, a circular letter has much to recommend it over a simple poster. We propose to circularize the patients we have not yet reached.

Where we would take issue with MacGregor and Baird is in their opinion that a separate clinic is advisable for smear taking, and that the procedure is not suitable for routine consulting hours. We have found the exact opposite to be true. We began by setting aside one afternoon a week for taking smears, but soon abandoned it because many patients were using the necessity of having to come back again as an excuse not to come at all. We maintain it is far easier—at least at

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.

Our particular thanks are due to the Wellcome Foundation, who provided a grant for a microscope, to Dr. E. Wachtel, of Hammer-smith Hospital, for her continuous help, and to Mr. Peter Durham for his surgical support.

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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