Primary dermatological care in general practice

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SUMMARY. Out of 2,409 clinical cases analysed over an eight-week period, 199 (8.2 per cent) were of a dermatological nature. Atopic eczema, warts, seborrhoeic eczema and acne vulgaris were encountered most frequently. The reaction to a skin clinic in the general practice, with access to liquid nitrogen, electrocautery and histopathology is described. Treatment of patients is summarized. It is suggested that having a practice skin clinic reduces the rate of hospital referrals by two thirds.

Introduction

Skin disease forms a major part of the morbidity seen in medical practice.[1] Usually it causes only minor discomfort and has a negligible mortality. Previous studies show that between 7 and 11 per cent of patients seek medical advice annually with a skin complaint.[1,2] Skin morbidity accounts for 13.6 episodes per 100 population.[3] A major British epidemiological survey has shown that 22.5 per cent of the population suffer from skin disease, yet only 20 per cent of this group seeks medical advice.[4] Another survey in America confirmed these observations.[5]

The aims of this study were to determine the nature and frequency of skin disease and to evaluate primary dermatological care in a large urban general practice.

Methods

The author, when working as a trainee practitioner in a large medical practice on the southern outskirts of Belfast, carried out a survey to determine the dermatological encounter incidence and types of skin complaints seen over an eight-week period. Each member of the practice was asked to record separately any clinical case of a dermatological nature, including personal details, diagnosis, laboratory tests, treatment and follow-up. Specific aids, such as, liquid nitrogen and electrocautery were installed in a separate clinic. Where the practitioners deemed it necessary, treatment was undertaken in this skin clinic by the author on a weekly basis. Laboratory services including histopathology were directly available at the local hospital. The total number of clinical cases during this study were obtained with the assistance of participating practitioners from surgery appointment lists and home visit records.

Results

From 2,409 clinical cases it was determined that 199 patients (8.2 per cent)—86 males and 113 females—had presented with a skin complaint. The age distribution is shown in Table 1. Ninety-six per cent of the patients were seen at the surgery and four per cent at home. One hundred and eighty-six (93.5 per cent) of complaints were presented to the doctor and 13 (6.5 per cent) of cases were covert.

A positive diagnosis was made for 170 complaints (85 per cent), while a provisional diagnosis was made in 27 cases (14 per cent). In two cases no diagnosis was offered. Laboratory facilities were utilized in 14 cases (7 per cent) to confirm the diagnosis. Table 2 shows the overall distribution of diseases.

Thirteen (6.5 per cent) of patients were referred directly to a hospital outpatient department. The participating practitioners said that 44 patients (22 per cent) would have been referred to hospital if facilities offered by the practice skin clinic had not been available. This indicated that the hospital referral rate was reduced to less than one third its expected value.

Discussion

As over 40 different skin conditions were encountered, many different forms of treatment were employed. Atopic eczema was usually treated with fluorinated steroids and emollients and, where necessary, supportive treatment with occlusive bandaging was employed.

Liquid nitrogen was used for the treatment of warts and molluscum contagiosum. This treatment can be carried out by the practice nurse after training in the technique. Alternatively, electrocautery was used for wart removal. With cautery only one visit is necessary. However, the use of liquid nitrogen is preferable for treatment of several sites.

Abrasive agents and systemic antibiotics were usually used in the treatment of acne vulgaris. Common skin complaints affecting infants—for example napkin dermatitis and seborrhoeic eczema—responded well to barrier creams, (hydrocortisone, 1 per cent). In these cases, the health visitor was most helpful with supportive education.

Table 1. Numbers of patients with skin disease according to age ($n=199$). (Percentages in parentheses.)

Age (years)	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+
Number	39 *(18.5)*	34 *(17)*	33 *(16.5)*	23 *(11.5)*	19 *(9.5)*	20 (10)	12 *(6)*	11 *(5.5)*	8 *(4)*

Table 2. Numbers of patients presenting with skin complaints according to aetiology. (Percentages in parentheses.)

Disease	Number (percentage) of patients
Dermatitis:	51 *(25.5)*
(a) Exogenous eczema	32 *(16.0)*
(b) Endogenous eczema	2 *(1.0)*
(c) Neurodermatitis	3 *(1.0)*
(d) Irritant dermatitis	4 *(2.0)*
(e) Ammoniacal dermatitis	10 *(5.0)*
Warts	28 *(14.0)*
Acne vulgaris	16 *(8.0)*
Seborrhoeic eczema	14 *(7.0)*
Bacterial infection	12 *(6.0)*
Psoriasis	11 *(5.5)*
Fungal infection	9 *(4.5)*
Drug reaction/urticaria	9 *(4.5)*
Verrucas	7 *(3.5)*
Parasitic infestations	6 *(3.0)*
Herpes infection	6 *(3.0)*
Molluscum contagiosum	4 *(2.0)*
Keratoses	4 *(2.0)*
Leg ulceration	4 *(2.0)*
Others	18 *(9.0)*

Table 3. Disposal of patients ($n=199$) after consultation. (Percentages in parentheses.)

No review	Personal review	Referred to hospital outpatients	Referred to practice skin clinic
106 *(53)*	43 *(21.5)*	13 *(6.5)*	37 *(18.5)*

For psoriasis, tar-based preparations were usually effective and, where necessary, ultraviolet light from a local physiotherapy department was also used. Fungal infection readily responded to antimycotic agents, and parasitic infections to benzene hexachloride. The surgical treatment of verrucas was usually avoided by application of salicylic acid (25 per cent) daily and surface débridement.

Keratoses were removed with a curette and cautery. Tissue was then sent for histopathology.

The overall dermatological case rate of 8.2 per cent is a significant part of the general practitioner's case load. As usual, it was found that there was a preponderance of female patients, 57 per cent in this series and 55 per cent in the Australian survey.[6]

The incidence of skin disease is highest in the first 25 years of life (52 per cent) and thereafter shows a steady decline. The conditions most commonly seen in early life are atopic eczema, acne vulgaris, seborrhoeic eczema and napkin dermatoses. Conversely, keratoses and leg ulceration are most commonly seen in the elderly. As has been shown, patients with skin disease most often attend the surgery (96 per cent). The small number seen at home (4 per cent) is confirmation that skin disease is seldom of a serious clinical nature.

However, it was found necessary to refer 13 (6.5 per cent) of the patients to a consultant dermatological clinic in hospital. This figure would have increased to 22 per cent if the facilities described had not been available. It was felt that the availability of liquid nitrogen was the major factor affecting referral rate.

In conclusion, the author and his colleagues consider that where proper facilities are available for treating dermatological problems in a group medical practice, the number of hospital referrals can be reduced and this relieves pressure on hospital facilities. The evaluation of whether patients' understanding, compliance and follow-up are affected will need further study. The provision of liquid nitrogen (rental about £13 per month) and electrocautery (£120 + VAT) represents a moderate capital outlay in a practice. Patients can be saved the financial and social inconvenience of attending hospital. Also, practitioners and their supporting staff can perhaps enhance the doctor–patient relationship by the offer of more efficient treatment.

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