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Original article

Dermatology referrals are valuable

Sahar H. Al-Natour *

Imam Abdul Rahman Ibn Faisal (University of Dammam), College of Medicine, Department of Dermatology, Dammam, Saudi Arabia

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Abstract

The practice of dermatology remains to be one that mainly deals with outpatients, but the role dermatologic consultations also play in the care of inpatients should not be undermined. A few studies examined the significance of dermatologic consultations/referrals.

Methods: 25 cases, randomly chosen from recent referrals to the dermatology service at King Fahd Hospital of the University, a tertiary health facility, were studied to determine whether the referral was necessary.

Results: The primary reasons for referral were for reevaluation of diagnosis and therapy (44%), therapy (52%) and diagnosis only in 4% (Table 2). Most frequent requesting services were primary care (32%), general practitioners (28%) and nonspecialist dermatologists (25%). The details of the 25 cases are discussed. The differences between dermatologists vs. non-dermatologists, non-specialists in the evaluation of the individual cases are discussed (Table 1). In 88% of cases, additional testing and tissue confirmation were needed in the evaluation and confirmation of the referrals (Table 3).

Conclusion: Complicated cases and those not responding to therapies given by non-dermatologist practitioners or non-specialists need to have access to tertiary care specialists. Such referrals are of value; however our findings are not informative about quality of care of patients who were not referred.

Keywords: Consultations; Referrals; Dermatology; Tertiary care

1. Introduction

There are a host of dermatologic conditions, many of which required complex treatment plans. Appropriate diagnosis and treatment of these conditions may be challenging. Most patients with skin disease do not see a dermatologist as their primary point of care and may be referred to a dermatologist for further evaluation and/or management. Are these referrals valuable? To assess this, we analyzed a sample of recently referred patients' records to determine whether the referral contributed to the diagnosis and treatment of the patients' conditions.

2. Material and methods

A prospective review of 32 referrals randomly selected using a random selection table was carried out over a period of 1 month at King Fahd Hospital of the University (KFHU), a tertiary care unit in Saudi Arabia. Patients were excluded if they had a prior evaluation or referral to another tertiary health center or if they had been on any treatment plan for more than 1 month prior to being seen at our hospital (to avoid the masking of the signs needed for accurate evaluation). Twenty-five cases met the inclusion criteria. Data extracted from patients' charts included demograph-

* Address: PO Box 2208, King Fahd Hospital of the University, Al-Khobar, Saudi Arabia.
E-mail addresses: saharnatour@yahoo.com, shalnator@uod.edu.sa.

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ics, requesting service, presumptive diagnosis, preliminary treatment, reason for consultation, dermatologic diagnosis, diagnostic tests performed, treatment, number of visits and a need for follow up by dermatology department. The referral forms of each patient were reviewed for the referring data and clinical information and were considered incomplete if any of the parameters listed on the forms were either missing or inappropriately filled.

3. Results

Of the 25 referrals/consultations reviewed, eleven (44%) were female and 14 (56%) were male with a mean age of 23.5 years (range 3 months-58 years, Table 1**).** The most frequent requesting service was primary health care clinics with 8 patients (32%), followed by general practitioners with 7 patients (28%, Table 1). The most frequent primary reasons for referral/consultation were treatment advice in 13 (25%) patients and diagnosis and treatment in 11 (44%, Table 2**).**

Twenty-two different cutaneous diseases were identified: lymphomatoid papulosis, contact dermatitis, erythema multiforme, prurigo nodularis, metastatic mycoses fungoides, epidermal nevus of the scalp, pityriasis rubra pilaris, psoriasis and steroid induced acneiform eruption, polycystic ovary syndrome and erythrodermic psoriasis and latent tuberculosis, pityriasis rosea, varicella, vitiligo, hidradenitis suppurativa, verruca vulgaris, acne, xanthogranuloma, onychomycoses, nevus sebaceous, skin tags, pityriasis alba and dermatitis artefacta. Systemic disease with cutaneous manifestations (metastatic mycoses fungoides and polycystic ovary syndrome) accounted for 2 (8%) cases (Table 1).

Laboratory tests were performed in all patients. Skin punch biopsy was the most widely used procedure and was performed in 12 (48%) of the patients **(**Table 3) resulting in a definitive diagnosis in all 12. One of the twelve patients (case 5) required a lymph node biopsy as well. Eleven (44%) of the referred patients required additional diagnostic tests. Other tests performed that were positive and confirmed the suspected diagnoses included extensive immunochemistry, specific markers and stains, imaging studies, gene derangement studies, ultrasonography, radiologic studies, hormonal profile, patch testing, serology, chemistry, Tzanck smear, KOH preparation, specimen cultures, filaria IgG4 antibody, ANCA, bleeding profile, HIV Ag/Ab and PPD testing (Table 3).

Seventeen out of twenty-five (68%) patients had started treatment for the skin condition before the dermatology consultation. The treatment was changed by the dermatol-

Table 1
Demographics, requesting services and referral diagnoses that were changed by dermatology.

Case #	Age (years)	Sex	Referral diagnosis	Requesting service/center	Final diagnosis (provided by dermatology)
1	40	F	Scabies vs skin allergy	General Practitioner	Lymphomatoid papulosis
2	20	F	Spreading skin lesions, ? Paget's disease	Surgery	Contact dermatitis
3	23	F	Herpes zoster	Internal Medicine	Erythema multiforme
4	21	F	Boils	Primary Care	Prurigo nodularis
5	36	F	Atopic dermatitis	Dermatology (2° care center)	Mycoses fungoides with skin metastases
6	1	M	Alopecia areata	Dermatology (resident)	Epidermal nevus scalp
7	32	M	Drug eruption	Primary Care	Pityriasis rubra pilaris
8	36	M	Acne	Primary Care	Psoriasis & steroidal acneiform eruption
9	15	F	Acne	Primary Care	Polycystic ovary syndrome
10	54	M	Erythroderma + Generalized plaque psoriasis	Dermatology (2° healthcare center/ specialist)	Erythrodermic psoriasis + latent tuberculosis
11	8	M	Rash	General Practitioner	Pityriasis rosea
12	26	F	Psoriasis	General Practitioner	Psoriasis
13	58	M	Psoriasis	General Practitioner	Psoriasis + Psoriatic arthritis
14	4	F	Erythema multiforme	General Practitioner	Varicella
15	23	M	Vitiligo	Primary Care	Vitiligo
16	27	F	Acne	General Practitioner	Hydradenitis suppurativa
17	5	M	Warts	Primary Care	Verruca vulgaris
18	21	M	Acne	Dermatology (2° healthcare center/ specialist)	Nodulocystic acne
19	6	M	Cyst	Pediatrics	Xanthogranuloma
20	3 mos.	M	Scaly dermatitis scalp	Pediatric surgery	Nevus sebaceous
21	15	M	Onychomycosis	Primary Care	Onychomycosis
22	28	F	Warts	General Practitioner	Skin tags
23	9	F	Hypopigmentation vs vitiligo	Primary Care	Pityriasis alba
24	24	M	Acne	Specialist dermatologist (2° healthcare center?	Acne vulgaris
25	56	M	? Elephantiasis + lower limb scarring	Internal medicine/Infectious disease	Dermatitis artefacta

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