

Pediatric skin diseases in primary care: Diagnostic dilemmas a primary physician may face

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ABSTRACT

Dermatology is an area that appears at the top of general practitioners (GPs) educational needs. Our curriculum in undergraduate classes is inadequate to equip us for the real clinical scenarios. Pediatric skin conditions pose a special dilemma to primary care practitioners. On the one hand, dermatologic problems are so common in childhood that the primary care physician is forced to become involved with many of them. On the other hand, the scope of dermatologic conditions found in children is so broad as to be beyond the skills of most primary care physicians. The secret to managing dermatologic problems in children within a primary care setting is to recognize that a relatively small group of conditions encompass the vast majority of reasons for which a primary care physician will be consulted. By recognizing those conditions and becoming expert in the treatment of these well-defined areas, the primary care physician can manage these better. Diagnosing pediatric skin conditions and recognizing the importance of early referral of the cases that fall outside one's expertise is an important measure of the primary care physician's competence as seen by patients and their families. In this article, I would like to highlight few pediatric dermatological cases that came to our family medicine clinic, where correct diagnosis and treatment led to good outcomes.

Keywords: Dermatology, generalpractice, knowledge, management, pediatric skin problem

Introduction

Pediatric skin diseases are one of the most common reasons for attending family medicine out-patient clinics. They cause a special dilemma to the primary care physicians.^[1] A study done by Lowell *et al.*, during a 2 year period showed that 36.5% of patients who presented to their primary care physician had at least one skin problem. Of 208 patients with skin disease, in 58.7% (122/208) it was their chief complaint. Of the 37.5% of patients referred to a dermatologist, 68% were referred on initial evaluation.^[2]

Most common among the skin conditions are eczema, bacterial, and fungal infections.^[3] Almost all of these common diseases can be managed within the primary care service. But, in reality,

as seen by a qualitative study by Marie-Luiset *et al.* in 2019, all interviewed GPs mentioned shortcomings in diagnosis and treating skin diseases. Several GPs criticized the inadequacy of dermatology during medical training and GP residency.^[4]

Many managed care systems rely on the primary care physician to serve as a gatekeeper, thereby limiting access to specialist care.^[5] Skin is so evidently seen and visible to all, that inadequacy on the part of a practitioner, either in diagnosis or management, is equally apparent to patient and doctor. Errors in diagnosis can lead to unnecessary referrals and poor care. Pediatric skin diseases pose a special dilemma since they may not be able to verbalize their complaint and there will be increasing concern from the parents.

It is natural for the public to expect their healthcare provider, most often a GP, to be able to recognize common skin conditions, know what useful therapeutic measures are available, and know when to

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Figure 1: Figure showing the pustular lesions in the armpit



Figure 2: Figure showing urticarial rash over the legs



Figure 3: Figure showing the bleeding pyogenic granuloma



Figure 4: Figure showing aplasia cutis



Figure 5: Figure showing pityriasis alba



Figure 6: Figure showing Molluscum contagiosum

seek expert help for diagnosis and exclusively specialist treatments. Sadly, the evidence from so many sources, such as patients and their support groups, secondary care colleagues, and studies such as the study in psoriasis,^[9] all point to a significant lack of knowledge, and even more distressing, a lack of empathy from too many GPs.

Case Series

These are a few of the pediatric dermatological problems that presented to the Family Practice clinic at Lourdes Hospital, Kochi over three months from November 2019 to January 2020.



Figure 7: Figure showing burrows in scabies in the finger webs

1. 8-year-old female came with features of respiratory tract infection since 10 days with simultaneous pustular lesion on right axilla and right foot. GP from a local clinic had treated with some antibiotic cream but new lesions were still appearing. On follow-up with pus culture, it turned out to be MRSA LESION. She was then treated with intravenous antibiotics for 10 days [Figure 1]
2. 11-year-old male with recurrent itchy erythematous rash and palatal petechiae since 1 week. He had rash not responding to antihistamine. Parents of the kid were upset that the lesions were not resolving. We had to reassure the parents that the lesions were due to urticaria and that it would take time to resolve. We treated him with short course of systemic steroids and the lesions resolved within 1 week [Figure 2]
3. 4-year-old male with uncontrollable bleeding from an erythematous papule which was progressively increasing in size since 4 weeks. It was diagnosed as pyogenic granuloma and then taken up for excision in view of bleeding [Figure 3]
4. 2-year-old boy with localized alopecia on forehead since birth. It was diagnosed as Aplasia cutis, which had no treatment as such. The cosmetic disfigurement was a concern for the parents. Parental counseling was done and patient was evaluated for any associated anomalies. He was referred to dermatologist for further management [Figure 4]
5. 8-year-old male with a few asymptomatic hypopigmented patches on the face since 1 month. It was diagnosed as Pityraias alba. No treatment was advised and reassurance given [Figure 5]
6. 2-year-old male child was brought by his mother who noticed multiple small painless umblicated lesions over the trunk. Similar history in one of the siblings. Diagnosis was made as Molluscum contagiosum and since the lesions are self-revolving, no specific treatment was given and reassured [Figure 6]
7. 9-month-old baby was brought to our family medicine opd with severe itching over the entire body, more around the wrist, webspaces, and trunk for more than 3 months. There were only few lesions on the face and the external genitalia was not spared. There was no history of atopy in the family. The child was taking topical steroids and some emollients from a local GP who apparently thought the lesions were of

atopic dermatitis which is a common condition but the child had no relief. On examination, there were burrows, papules and scratch marks over the specified sites. A provisional diagnosis of Scabies was made and general measures like treating all household contacts, laundering of bed linen and cloth advised. Topical Scabicide (Permethrin 5% overnight single application) was advised along with oral antihistamines [Figure 7]

8. 6-day-old baby was brought by the parents who were concerned about 2-3 pustules around the neck and forehead without any other symptoms. A provisional diagnosis of transient neonatal pustular melanosis was made and the parents were counseled about the benign nature of the disease and that the pustules would rupture spontaneously leaving brown macules which would resolve in 3 months' time. The parents was also asked to come for follow-up in case if there are any signs of infection.

Conclusion

GPs should gain knowledge by whatever means suits their learning style and fill in the gaps that many undergraduate medical courses still ignore and that are compounded by minimal vocational training schemes with dermatological educational content. If dermatology were taught at an early stage of medical training then enthusiasm and confidence in the subject could be developed. This issue thus also tries to emphasize the need of increasing the period of dermatology posting during the post graduate training period of family medicine in India which at present is only 2 weeks in the final year.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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