



2<sup>nd</sup>  
Edition

# Clinical Pediatric Dermatology

Editor  
**Jayakar Thomas**



Co-Editor  
**Parimalam Kumar**

Foreword  
**UR Dhanalakshmi**



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## Basic Relevant Investigations

### HEMATOLOGY AND BIOCHEMISTRY

Different skin diseases show local or systemic blood changes. Therefore, blood picture may be of help to reach a diagnosis and may be indispensable in certain dermatoses. However, not every dermatological case is in need of a list of laboratory tests that may be a burden and might bother the patient leading to loss of confidence in the physician.

### TZANCK TEST

Cytological examination from the floor of a bulla is used to confirm diagnoses of bullous diseases. In most bullous eruption, the smear will show only inflammatory cells. In pemphigus, numerous acantholytic cells with large nuclei and condensed cytoplasm are found. In herpes simplex, zoster, and varicella lesions, the smear shows large, multinucleated giant cells.

### EXAMINATION OF SKIN SCRAPINGS

This is usually used for the diagnosis of fungal lesions. Scraping is taken of the lesions of the scalp, intertriginous areas, feet, or other areas. The skin is cleaned with spirit swab and left to dry. Scrape the area with a scalpel or the edge of the slide on a clean slide. Add one drop of 10–20% of KOH preparation.

Hyphae and spores appear as oval bodies and refractile against the background of cells and debris. Confirmation is usually by culture of the scraping on special media such as Sabouraud's agar medium.

Similar examination is also used to demonstrate *Acarus*, lice and *Demodex*, and also for hair shaft abnormalities.

### EXAMINATION OF SMEAR FROM DISCHARGE

This is done to demonstrate bacteria (gram-positive cocci), parasite (Leishman bodies), and fungal grain (mycetoma). This has to be supported by culture when necessary.

### SLIT-SKIN SMEAR

In all suspected cases of Hansen's disease, this is done to demonstrate *Mycobacterium leprae*.

### PATCH TESTS

Patch tests are usually done to detect contact sensitizers of the delayed hypersensitivity type. Patch test is easy to apply and more safe than other skin tests. Patch testing proves only that the patient has a contact sensitivity to a specific contactant, but this does not necessarily mean that

this substance in the patch test is the only that can cause the reaction but there may be other substances that may cause such reaction.

## WOOD'S LIGHT

This is an ultraviolet lamp with Wood's filters that produces a wavelength about 365 nm. Wood's light is an important investigative tool in diagnosis and treatment of specific skin diseases.

Wood's lamp may be used to help in the diagnosis of tinea capitis, erythrasma, pityriasis versicolor, certain pigmentary disorders, and detection of porphyrins.

## DERMOSCOPY

This is a noninvasive technique where using a magnifying instrument, the details related to pigment, vasculature, and other changes in the skin are studied.

## SEROLOGY

This is done with consent where necessary to assess human immunodeficiency virus (HIV) status.

## SKIN BIOPSY

Skin biopsy is an important procedure to confirm an accurate diagnosis for a suspected skin lesion. In circumstances like mastocytosis and lupus erythematosus, special stains and immunofluorescence respectively may be required.

Although it is likely that the pace in the development of scientific technologies will only accelerate with time, access to such technologies may not be the rate-limiting step in cutaneous research. In fact, a strong case may be made that the limiting step will be the availability of well-characterized patient populations for study and an unfathomable clinical knowledge.

# Clinical Pediatric Dermatology

## Salient Features

- *Clinical Pediatric Dermatology* (Second Edition) is designed as an academic project with the target readers as both postgraduate students and practising dermatologist.
- All chapters encompass glimpses of existing knowledge in the light of recent advances in the segment of fungal diseases and the comorbidities.
- In this second edition, a chapter on "Autoimmune Blistering Diseases" is included.
- This title is a helpful tool—not only for the student who needs an expert source of basic knowledge, but also for the pressured practitioner who needs a clear, concise, and balanced distillation of the best information.

**Jayakar Thomas** MD DD MNAMS FRCP FRCPC PhD DSc is a Professor and Head, Department of Dermatology, Chettinad Hospital and Research Institute, Chennai, Tamil Nadu, India. He is known to be a prolific writer of Dermatology books. He has more than 12 titles to his credit, apart from authoring chapters in Textbooks of Dermatology, Pediatrics, Adolescents, and Allergy. He has also authored more than 200 original scientific articles in various National and International journals.



**Parimalam Kumar** MD DD MNAMS FRCP IFAAD is a Professor and Head, Department of Dermatology, Madras Medical College and RGGGH, Chennai, Tamil Nadu, India. She has teaching experience of over 27 years and has been an external examiner for PG Degree course at various universities in India. She is a popular speaker at various National and International fora. She has authored and contributed chapters in about 60 publications.



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