

Management includes protection from exposure to ultraviolet light, genetic counselling and follow-up for malignancies. Amniocentesis for cell culture and early interruption of pregnancy may aid in prevention.

REFERENCES

1. Rook KA, Genetics in Dermatology. In: Text Book of Dermatology, 3rd edn. London, Blackwell Scientific Publications, 1979, pp 124-127.
2. Gupta CM, Bhate RD, Chander V. De Sanctis Cacchione Syndrome. Indian J Pediatr 1988, 55: 991-993.
3. Reed WB, De Sanctis Cacchione Syndrome. Arch Dermatol 1977, 113: 1561-1563.
4. Reed WB, Landing B, Sugarman G, Cleaver JE, Melnyk J. Xeroderma pigmentosum. JAMA 1969, 207: 2073-2079.
5. Seigelman MH, Sutow WW. Xeroderma pigmentosum. J Pediatr 1965, 67: 625-630.

Superficial Fungal Infections in Newborns

R. Chandra
B. Vishnu Bhat
N.C. Baruah
B.D. Bhatia

Superficial fungal infections in the newborn period are extremely rare and include candidiasis, aspergillosis and dermatophytosis(1,2). Although dermatophytes are ubiquitous, most exposures do not result in clinical infections(3). Congenital cu-

taneous candidiasis, often extensive but benign form of neonatal infection, is an uncommon entity(3). We report three cases of neonatal superficial fungal infections seen among 16,000 babies over a 5-year period.

Case Reports

Case 1: A full term male baby, developed rashes on the 3rd day of life which became generalized discrete pustules on the 4th day. The lesions involved even the palms and soles (Fig. 1), but spared the scalp and genitalia. The baby was free of constitutional symptoms. A smear from the lesions revealed *Candida* and culture con-

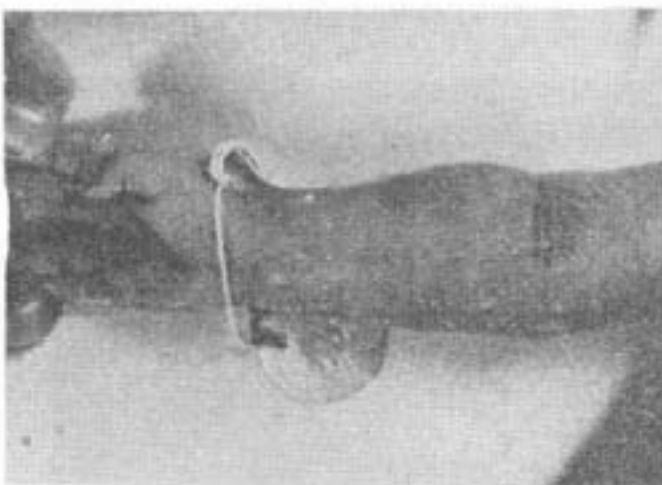


Fig. 1. Close-up of upper limb showing the pustular lesions.

From the Departments of Pediatrics (Neonatal Division) and Dermatology and S.T.D., Jawaharlal Institute of Post-Graduation Medical Education and Research, Pondicherry 605 006.

Reprint requests: Dr. B. Vishnu Bhat, Associate Professor of Pediatrics, Jawaharlal Institute of Post-Graduation Medical Education and Research, Pondicherry 605 006.

Received for publication: March 24, 1992;

Accepted: May 20, 1992

firmed the presence of *Candida albicans*. Blood culture for *Candida* was negative. There was no oral thrush. His mother had vaginal candidiasis. Local application of gentian violet paint over 4 days made the pustules dry, leaving behind mildly scaly erythematous skin. The follow-up after a week showed normal skin and the child was healthy 3 months later.

Case 2: A female baby, on the 16th day developed erythematous, well defined patches on the face, chest and abdomen (Fig 2). The lesions had minimal marginal scaling and tiny pustules on the edges. A scraping for fungus was positive by micro-



Fig. 2. Clinical photograph depicting lesion over the left cheek.

scopy and culture grew *Microsporum canis*. The mother was suffering from paraplegia and had patches of *Tinea corporis* on her body. One month treatment with 1% clotrimazole application twice a day cured the condition.

Case 3: A term male baby who had severe birth asphyxia and seizures on the first day of life, developed oral thrush on the fifth day. An erythematous patch appeared on the back on 7th day with well demarcated raised edges and peripheral tiny vesicles. *Tinea corporis* was identified by microscopy of the scrapings from the lesion. The culture grew *Trichophyton rubrum*. The baby was treated with oral gentian violet point for the thrush. The local application of clotrimazole cream twice daily to the skin cleared lesions. The mother had no evidence of *Tinea corporis*.

Discussion

Neonatal candidiasis represents acquisition of the organism during vaginal passage and usually presents with mucocutaneous lesions after the first week of life(4,5). The present case had manifestations on the 3rd day. The reported incidence of congenital candidiasis is 1%(6). The generalized pustular form seen in our case is rare(7,8). The infants who develop congenital cutaneous candidiasis are immunologically normal(3). The prognosis for neonatal candidiasis is excellent as in our case and they respond to topical antifungal therapy(5,9).

Neonatal dermatophyte infection is rare and there are very few documented cases in the literature. In King *et al*'s series(10) of five infants with *Tinea corporis*, there was only one 3 weeks old neonate. Pavithran *et al.* reported *Tinea corporis* in a 9-day old premature infant(1). A one and half months old infant with

dermatophytic infection was reported by Khare *et al.* It presents as one or several circular erythematous patches with a papular, scaly, annular border and a clear centre or it may be inflammatory throughout(1,7). Diagnosis is confirmed by microscopy of potassium hydroxide preparation from the lesion. Cultures are usually not necessary for diagnosis(7). In the first case, the mother was the obvious source of infection who had extensive *Tinea corporis* whereas in the second case no source of infection was evident. One of the many visitors who have handled and cuddled the baby could have transmitted the disease to the baby. Moreover, the baby had the insults of obstructed labor, severe birth asphyxia and administration of broad spectrum antibiotics.

REFERENCES

1. Miller MJ. Fungal infections. In: Infectious Diseases of the Fetus and Newborn Infant. Eds Remington JS, Klein JC, Philadelphia, WB Saunders Co, 1976, pp 637-678.
2. Allen GW, Andersen DH. Generalised aspergillosis in an infant 18 days of age. Pediatrics 1960, 26: 432-440.
3. Stein DH. Fungal infections. In: Pediatric Dermatology, Vol. II. Eds. Schachner LA, Hansen RC, New York, Churchill Livingstone, 1988, pp 1415-1450.
4. Kozinn PJ, Taschdjian CL, Weiner HH. Incidence and pathogenesis of neonatal candidiasis. Pediatrics 1958, 21: 421-429.
5. Storer JS, Hawk RJ. Congenital and neonatal candidiasis. In: Pediatric Dermatology. Vol I. Eds Schachner LA, Hansen RC, New York, Churchill Livingstone, 1988, pp 290.
6. Schachner MD, Shirtz P. Vesicular, bullous and pustular disorder. Pediatr Clin North Am 1983, 30: 609-631.
7. Weston WL. Practical Pediatric Derma-

tology, Boston, Little, Brown and Company, 1979, pp 79-96.

8. Taschdjian CL, Kozinn PJ. Laboratory and clinical studies of candidiasis in the newborn. J Pediatr 1957, 50: 426-433.
9. Johnson DE, Thomson TR, Ferrieri P. Congenital candidiasis. Am J Dis Child 1981, 135: 273-275.
10. King WC, Waltier IK, Livingood CS. Superficial fungus infections in infants. Arch Dermatol 1953, 68: 664-667.
11. Pavithran A, Dharmaratnam AD, Vijayalakshmy A. *Tinea corporis* in a premature infant. Indian J Dermatol Venereol Leprol 1986, 52: 293-294.
12. Khare AK, Singh G, Pandey SS, Sharma BM. *Kerion, Tinea faciei and Tinea corporis* in an infant. Indian J Dermatol, Venereol Leprol 1984, 50: 271-272.

Freeman Sheldon Syndrome with Bilateral Simian Crease and Malpositioned Second Toes

S. Phadke
A. Sharma
S.S. Agarwal

The Freeman Sheldon Syndrome, also known as whistling face syndrome or cranio-carpo-tarsal dystrophy, was first described in 1938 by Freeman and Shel-

From the Department of Medical Genetics, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Rae Bareilly Road, P.O. Box. 375 Lucknow.

Reprint requests: Dr. S.S. Agarwal, Professor and Head, Department of Medical Genetics Sanjay Gandhi PGI, P.B.N. 375, Lucknow.

Received for publication: March 3, 1992;

Accepted: May 20, 1992