

Letter To The Editor: Malassezia Infection In Neonates And Infants

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Abstract

DEAR EDITOR,

One of the commonly encountered superficial infections of the skin is Tinea Versicolor caused by Malassezia Species, a lyophilic yeast that is common of normal skin. Rarely, they can become invasive to cause opportunistic systemic infection in the presence of certain predisposing factors. During the past two decades, this group of fungi has gained increasing importance. Newer species have been identified and associations of the organism with different disease entities have been described.

The fungus is dimorphic, occurring as a saprophytic yeast form and a parasitic mycelial form. Yeast is the prime form isolated in vitro from the culture media. The normal human skin flora consists predominantly of the yeast phase. Pathological specimens consist predominantly of hyphae with clusters of spherical yeasts.

In different studies, hospitalized infants have shown a positive skin culture for Malassezia furfur, the incidence varying from 37 % to 84 %. Many healthy infants develop a cutaneous flora comprising Malassezia species within the first 6 months of life.^{1, 2}

Recently several cases of M. furfur & M. Pachydermatis systemic infections and septicaemia have been reported, most commonly associated with deep line vascular catheters in patients receiving parenteral therapy with extended stays in intensive care unit.³

Many of the emulsions used for parenteral therapy are rich in long chain fatty acids. An ideal microenvironment is established at the catheter site at which a small amount of the oily emulsion can pool, supporting growth of the endogenous lipophilic organism present on the skin surface. The catheter provides a barrier break in the skin through

which the proliferating organism can enter the blood stream. The lungs in which there is vascular lipid disposition of the parenteral emulsions provide an ideal site for dissemination of the organism. Three cases of severe bronchopneumonia and respiratory failure in three premature infants in whom Broviac catheters were in place are reported by Marcon M J and Powell D A.⁴ All three had fatal outcomes characterized by massive involvement of the lungs and endocardial vegetations were present in two. Risk factors included young gestational age (younger than 26 weeks) hyaline membrane disease, duration of ventilator and duration of antimicrobial therapy.

The diagnosis of catheter related septicaemia can best be made by recovering organism in blood culture, drawn from infected catheters. Blood culture bottles do not appear usually cloudy, therefore, subculture to blood agar overlaid with virgin olive oil may be necessary to recover the organism.

The fungus which adheres to the lumen of the catheter and cause the catheter acquired sepsis can not be eradicated by discontinuing lipid infusions or administering miconazole or amphotericin B through the catheter, though in vitro, M. furfur appears susceptible to both Amphotericin B and imidazoles. Catheter removal and discontinuing parenteral lipids have been found to be curative.⁵

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