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Safety and Tolerability of Fluconazole in Children

Vas Novelli¹ and Helen Holzel²

Infectious Diseases Unit¹ and Department of Medical Microbiology,² Great Ormond Street Hospital for Children NHS Trust, London, United Kingdom

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The safety profile of fluconazole was assessed for 562 children (ages, 0 to 17 years) comprising 323 males and 239 females. The data are derived from 12 clinical studies of fluconazole as prophylaxis or treatment for a variety of fungal infections in predominantly immunocompromised patients. Most children received multiple doses of fluconazole in the range of 1 to 12 mg/kg of body weight; a few received single doses. Administration was mainly by oral suspension or intravenous injection. Overall, 58 (10.3%) children reported 80 treatment-related side effects. The most common side effects were associated with the gastrointestinal tract (7.7%) or skin (1.2%). Self-limiting, treatment-related side effects affecting the liver and biliary system were reported in three patients (0.5%). Overall, 18 patients (3.2%) discontinued treatment due to side effects, mainly gastrointestinal symptoms. Dose and age did not appear to influence the incidence and pattern of side effects. Treatment-related laboratory abnormalities were uncommon, the most frequent being transient elevated alanine aminotransferase (4.9%), aspartate aminotransferase (2.7%), and alkaline phosphatase (2.3%) levels. Although 98.6% of patients were taking concomitant medications, no clinical or laboratory interactions were observed. The safety profile of fluconazole was compared with those of other antifungal agents, mostly oral polyenes, by using a subset of data from five controlled studies. Side effects were reported by more patients treated with fluconazole (45 of 382; 11.8%) than by those patients treated with comparable agents (25 of 381; 6.6%); vomiting and diarrhea were the most common events in both groups. The incidence and type of treatment-related laboratory abnormalities were similar for the two groups. In conclusion, fluconazole was well tolerated by the pediatric population, many of whom were suffering from severe underlying disease and were taking a variety of concurrent medications. The safety profile of fluconazole in children mirrors the excellent safety profile seen in adults.

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