pallor, a grade III/VI systolic murmur and inspiratory crackles. Laboratory investigation revealed microcytic hypochromic anemia (hemoglobin 5.7 g/dL, mean corpuscular volume of 58.9 fL, reticulocyte index 2.18) with iron deficiency, normal renal and liver function, and normal coagulation profile. Admitted under iron supplementation with progressive rise in hemoglobin. Infectious causes were excluded. Bone marrow biopsy was normal. After 1 month he developed fever, cough and dyspnoea, without hemoptysis. The chest radiograph showed diffuse alveolar-type infiltrates. Bronchoscopy with bronchoalveolar lavage revealed over 75% haemosiderin-stained macrophages. Lung biopsy specimen was negative for vasculitis, immune complex deposition or granulomatous disease. The immunological study was negative, including anti-GBM, ANA, c-ANCA, IgE cow's milk antibodies and rheumatoid factor. Echocardiography revealed no evidence of pulmonary hypertension. The diagnosis of IPH was considered and the patient was started on prednisolone (2 mg/kg/day) with improvement in respiratory symptoms after 1 week. Despite corticosteroids he kept having IPH exacerbations and chronic anemia and initiated hydroxychloroquine with good clinical response.

Comments: In this case the association of iron deficiency anemia refractory to iron supplementation with the sudden onset of respiratory symptoms and the suggestive radiological presentation established the diagnosis of IPH.

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DRUG ADMINISTRATION RELATED PROBLEMS IN OUTPATIENT CHILDREN: MORE THAN FORMULATION ASPECTS

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Background: Optimal pharmacotherapy for children requires that drugs can be easily administered. However, parents often encounter problems leading to medication errors. The aim of this study was to explore the nature of drug administration related problems in outpatient children and to assign their most likely solutions.

Methods: A questionnaire was issued to parents of outpatient children (0-12 years) and adolescents (12-18 years). Complaints relating to the administration of tablets, capsules, oral liquid preparations, rectal preparations or preparations for throat, nose ear or eye were identified, categorized and compiled into a patient related or product related problem. The most likely solutions to these problems were assigned.

Results: One hundred questionnaires were returned, 71 of them reporting 154 different complaints (including multiple complaints about the same product). These complaints were compiled into 68 patient related and 20 product related problems. Twenty-eight (41%) of the patient related problems were most likely to be solved by product optimization, 12 (18%) by behavioural interventions and 28 (41%) by a combination of both. Seventeen (85%) of the product related problems were most likely to be solved by product optimization, 2 (10%) by behavioural interventions and 1 (5%) by a combination of both.

Conclusion: Interventions to address problems in paediatric drug administration cannot be limited to formulation aspects. In order to make medicines more acceptable to children a broader approach is required involving both product optimization as well as guidance for improvement of behavioural aspects.

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FELT OR ENACTED CRITICISM THEORY - A CONTRIBUTION TO THE UNDERSTANDING OF PARENTS' DECISION MAKING IN ACUTE CHILDHOOD ILLNESS

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Acute childhood illness is the most common experience of illness in families. These illnesses create considerable uncertainty and anxiety for parents concerning when to seek help for a sick child. This paper explores findings, from a doctoral research project, which contribute to understanding of parents' decision making at these times. This grounded theory study used 24 in-depth interviews in 4 rounds of data collection to explore psychosocial processes in 15 families when children are acutely