

PP-082 THE ROLE OF VITAMIN D IN CHILDREN WITH COMMUNITY-ACQUIRED PNEUMONIA

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Both in the structure of the general and respiratory system, childhood morbidity and mortality, pneumonia still occupies a leading position.

Aim To determine the value of vitamin D in young children with community-acquired pneumonia.

Material and Method The level of serum vitamin D (VD) was studied in 50 children aged 1 to 3 years with community-acquired pneumonia (CAP). VD deficiency was defined as serum 25(OH)D concentration <20 ng/ml, insufficiency as 20 to 30, and normal as ≥ 30 ng/ml.

Results The results obtained indicate that the level of vitamin D in 40% of children was normal (> 50 ng/ml), 45.2% of children had insufficiency, and 14.8% of children had VD deficiency (figure 1).

According to the literature, the VD level provides protection against infection due to genes whose operation is

regulated by 25(OH)D3. Children in the group with insufficiency and VD deficiency had a severe course of CAP, hyperthermic syndrome - febrile temperature lasted for 3 or more days in 45.5% of patients, and 54.5% of patients had low-grade fever. The main complaints were productive cough in patients with VD insufficiency or deficiency - 76% of cases, dry in 22.7% (table 1).

Dry cough was significantly more common in children aged 2–3 years, and productive cough was more common in children aged 1 year. Children complained of decreased appetite, weakness, and fatigue in 62% of cases, while in 38% of children whose vitamin D level was normal, these complaints were mild. Inspiratory dyspnea was observed in children with insufficiency or deficiency of vitamin D (77.8%), in other children - mixed dyspnea.

Conclusions The level of Vitamin D plays an important role in the course, severity and unfavorable outcome of CAP in young children, which deserves special attention and requires a more in-depth analysis in the diagnosis, prevention and treatment of diseases of the bronchopulmonary system in children.

PP-083 COMPLIANCE WITH DORNASE ALFA POST COMMENCEMENT OF KAFTRIO IN A PAEDIATRIC CF POPULATION

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Aim Cystic fibrosis (CF) is a chronic disease with a high prevalence in Ireland. Patients are prescribed nebulised therapy in the form of dornase alfa to act as a mucolytic. The discovery of CFTR modulators has improved clinical outcomes for most patients, however, compliance with traditional therapies has decreased. The aim of this study is to assess compliance with dornase alfa in a paediatric cohort post commencement of triple therapy (tezacaftor, ivacaftor, elexacaftor branded as Kaftrio® in Ireland) over a 6 month period from May 2023 to October 2023.

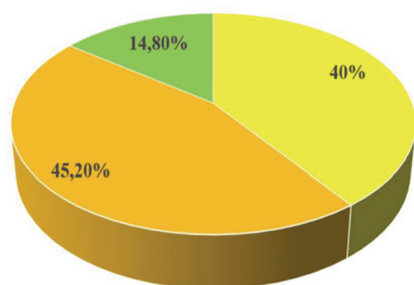
Material and Method Patient data (n=20) was extracted via pharmacy records from the national on-line prescribing system ('High Tech Hub') comparing prescribed dose to dispensed dose of dornase alfa. Patient data was anonymised. Qualitative data is presented comparing the prescribed and dispensed dose (monthly prescriptions filled) over a 6 month period.

Results Patients included were between 6–18 years old. Patients were prescribed dornase alfa regularly (14/20) or as required (6/20). Of the patients with regular prescriptions, 29% (4/14) of patients were adherent with their prescribed medication. 42% (6/14) of patients prescribed dornase alfa regularly did not obtain this medication at any point during the study. Of the 6 patients who were prescribed this medication as required, only one patient utilised it in the study period.

Conclusions Our centre demonstrates a high rate of non-adherence with dornase alfa. Non-adherence is common in patients with a chronic illness like CF particularly since the advent of modulator therapies. It is important to monitor adherence to ensure optimal outcomes, discuss alternate options, support compliance, and identify possible cost savings if medications are not utilized. Records prior to

Abstract PP-082 Table 1 Clinic of community-acquired pneumonia depending on vitamin D(%)

Signs	Attribute	Insufficiency and deficiency VD	Normal VD
Asthenovegetative syndrome	Decreased appetite	21	15
	weakness	30	11,2
	fatigue	11	11,8
Temperature	febrile	45,5	54,5
	low-grade fever	54,5	45,5
Cough	productive	76,0	28,0
	dry	22,7	17,3
Dyspnea	inspiratory	77,8	22,2
	mixed	22,2	-
Cough	productive	76,0	28,0
	dry	22,7	17,3
Dyspnea	inspiratory	77,8	22,2
	mixed	22,2	-



■ Vitamin D is normal ■ Vitamin D shortage ■ Vitamin D deficiency

Abstract PP-082 Figure 1 Vitamin D indicators in children with community-acquired pneumonia