Use of Bioregulation Therapies for a Severe Otorhinological Problem

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A case of a patient with primary ciliary dyskinesia is presented. This condition resulted in difficult otorhinological management, including several surgical interventions, the use of multiple antibiotics, numerous radiological and immunological investigations, and prolonged conventional medical treatments, without satisfactory clinical results. The incorporation of bioregulatory therapies into her treatment regimen had a significant impact on her progress and quality of life.

Introduction

Primary ciliary dyskinesia is a congenital disorder affecting the structure of cilia and flagella. It is an autosomal recessive disease with a low incidence (1 in 15,000 live births).[1] Clinically, it manifests with various signs and symptoms, such as recurrent obstructive bronchitis, repeated pneumonia, recurrent sinusitis, recurrent acute otitis media, and bronchiectasis.

The ciliary ultrastructure defects include impairment of the dynein arms, absent or changed radial proteins, and a switch in the number of microtubules and/or their arrangement in the axoneme. Major defects can be an absence of or changes in the axoneme or plasma membrane of the cilia and flagella. A definitive diagnosis is made by using electron microscopy to determine ciliary ultrastructure changes in transverse sections of cilia.[2]

Clinical case

The case is that of a female patient born at full term by spontaneous delivery, weighing 3450 g at birth. The neonate was not breastfed, and she had received replacement milk products since birth. The newborn also received the full program of vaccinations, including pneumococcal polysaccharide vaccine.

Family medical history: The patient's father experienced repeated otitis, and her mother experienced frequent pharyngotonsillitis. Her paternal aunt experienced repeated sinusitis.

Disease history: At the age of 1 month, the patient experienced viral disease of the upper respiratory tract. At the age of 4 months, she was diagnosed as having obstructive bronchial syndrome, which was treated with amoxicillin and puffs of a combination of salbutamol and beclomethasone. This disease recurred frequently, and at the age of 1 year 2 months, she was diagnosed as having infantile asthma. She received multiple treatments, including puffs of salbutamol, fluticasone, decongestants, antihistamines, mucolytics, and various antibiotics. Her subsequent course indicates rhinitis, rhinosinusitis, and otitis on repeated occasions. At the age of 4 years, cystic fibrosis was excluded by a normal sweat test result.

At the age of 4 years 7 months, in view of the succession of episodes of rhinosinusitis with simultaneous otitis media with effusion and numerous attacks of acute otitis media, an adenoidectomy was performed and tympanostomy tubes were inserted. The anatomical pathology report indicated adenoidal lymphoid tissue with moderate follicular hyperplasia and an erosive acute and chronic inflammatory process of the surface lining epithelium.

At the age of 4 years 8 months, she was examined by an immunologist. At this time, she was diagnosed with acute otitis media 8 times a year and acute sinusitis 5 times a year. She also experienced transient hypogammaglobulinemia; this condition improved. The clinical investigations included the following: IgE positive to foods and certain foodstuffs (i.e., peanuts, eggs, and milk) and coloring agents; IgG1-IgG2-IgG3-IgG4, normal result; response antibodies to pneumococcal 23-valent vaccine, normal result; and a minor change

in chemotaxis. The treatment recommendation was as follows: desloratadine, puffs of intranasal mometasone, montelukast, and amoxicillin, 1 dose per day for 3 months.

At the age of 5 years, in view of the persistent repeated rhinosinusitis, endoscopic surgery of the paranasal cavities was performed. The anatomical pathology report indicated that the right maxillary sinus mucosa was affected by a marked acute and chronic inflammatory process and extensive erosion of the lining epithelium, without specific effects. The left maxillary sinus mucosa was affected by a moderate acute and chronic inflammatory process.

At the age of 5 years 4 months, a biopsy specimen of the nasal respiratory mucosa was obtained. The specimen showed preciliated cells, caliciform cells, and ciliated cells with mature stalks; these stalks showed a 9×2 microtubular skeleton with no internal arm or with both arms of dynein in approximately 50% of the cilia examined. A number of preserved additional peripheral microtubules, basal bodies, and radial spokes were also seen in the specimen. These findings were compatible with ciliary dyskinesia.

At the age of 7 years 8 months, the patient was referred to me by the otorhinolaryngologist because of continued and repeated rhinosinusitis. She had received the following medications during the previous 2 years: montelukast and cetirizine constantly, puffs of intranasal mometasone as necessary, and frequent administration of antibiotics. There was a request for an integrated approach with biological medicine.

The following medications were prescribed: Lymphomyosot, Traumeel, Mucosa compositum, and Euphorbium compositum. Montelukast and cetirizine were discontinued. In the first month of integrated treatment, the patient experienced a number of viral infections; these were managed satisfactorily with Gripp-Heel, Angin-Heel, and Husteel.

At the age of 7 years 10 months, the patient was doing very well. Treatment was continued with Galium-Heel plus Histamin-Injeel, Sinusitis-Nosode-Injeel, Coenzyme compositum, Ubichinon compositum, and Grippe-Nosode-Injeel. The treatment with Mucosa compositum was maintained.

She was also doing well at the age of 8 years 6 months. The patient led a normal life, including swimming in the pool and at the beach. In the winter, Engystol was administered prophylactically every other week and Euphorbium compositum was administered at the onset of any rhinitis.

At the age of 8 years 10 months, she experienced viral pharyngitis and was given Angin-Heel, Engystol, and Mucosa compositum. At the age of 9 years, the patient experienced viral tracheitis and was given Engystol and Husteel. At the age of 9 years 1 month, she was hospitalized because of acute gastroenteritis due to a rotavirus. At the age of 9 years 10 months, the patient had influenza due to an AH1N1 virus. She was treated with oseltamivir.

The girl is now aged 10 years 1 month and is doing very well. She has not experienced further rhinosinusitis infections, and she has not needed antibiotics in the last 2 years. She leads a normal life.

Discussion

This patient presented with primary ciliary dyskinesia that could not be satisfactorily managed with what conventional medicine has to offer. After numerous treatments, several surgical interventions, and continued and repeated rhinosinusitis, she was referred to me to try supportive treatment with antihomotoxic medications.

The patient's condition was approached using the three therapeutic pillars of homotoxicology: treatment was started with the administration of drainage products (Lymphomyosot), the modulation of the patient's chronic inflammatory state (Traumeel), and the stimulation of the body's support for the recovery of the diseased tissues (Mucosa compositum).

In a second stage of treatment, Galium-Heel was prescribed to stimulate nonspecific defenses and as a detoxifying agent; and Coenzyme compositum and Ubichinon compositum were added to stimulate blocked enzymatic processes.

The patient's response has been very good: she is no longer using antibiotics, she no longer has to miss school, and she is starting to lead a normal life for her age. This is an important achievement given the previous restrictions on her, something that is not often considered.[3]

Clearly, treatment with bioregulatory medications produced a notable change in the course of this patient's disease. Their contribution in the integrated management of patients with repeated rhinosinusitis and primary ciliary dyskinesia must be considered.

References:

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