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17. TWO ENDS OF THERAPEUTIC RESPONSE SPECTRUM IN THE CLINICAL EVOLUTION OF EOSINOPHILIC PNEUMONITIS.

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Introduction. Eosinophilic pneumonia (EP) is a rare disorder encompassing a heterogeneous presentation. The two primary types of EP are acute eosinophilic pneumonia (AEP) and chronic eosinophilic pneumonia (CEP), both characterized by significant eosinophil accumulation in lung tissues and/or bronchoalveolar lavage (BAL) fluid

Case statement. We present a series of clinical cases illustrating diverse therapeutic outcomes in Eosinophilic Pneumonia. Case no 1. A 57 y.o. female, reported progressive dyspnea, cough, and fatigue. Her rest saturation was 90%, with rapid desaturation at 76% at moderate physical exercise. Chest imaging showed bilateral ground glass opacities, and pulmonary consolidation areas, with predominant basal distribution, accompanied by a mild hilar lymphadenopathy up to 12mm. Her lung function presented a severe restrictive disorder, with an FVC at 36.9% and significantly decreased DLCO at 19%. Bronchoalveolar lavage (BAL) showed 23% eosinophils. Corticosteroid therapy (Tab. Prednisolone 60 mg) led to significant clinical improvement, with substantial radiological regression. There was an improvement in lung function, but only with a 10% increase in all parameters after 1 month of treatment. Case no 2. A 64 y.o. female, previously known with allergic asthma for more than 30 years, has experienced an episode of Eosinophilic Pneumonitis 6 years ago, with a rapid improvement to corticosteroids. Her exposure history revealed a contact with her pet dog, and some herbal formulation that she has been taking lately. She presented dyspnea, back pain, and fatigue. Radiological findings indicated bilateral lung lesions, with pulmonary consolidation areas suggesting the reversed halo sign. She had a restrictive ventilator abnormality with FVC at 41.5%, FEV1 at 48%, and severely decreased DLCO at 20.2%. Her CBC was consistent with peripheral eosinophilia. During hospitalization she received corticosteroid therapy with Dexamethasone 12 mg, resulting in significant clinical improvement within 8 days and complete radiological resolution of bilateral broncholobular lesions.

Discussions. Eosinophilic pneumonia (EP) is characterized by eosinophilic infiltration into the lungs, often accompanied by peripheral blood eosinophilia. This categorization excludes conditions, such as allergic asthma, where airway and peripheral eosinophilias are present without parenchymal infiltration and radiographic changes. The cause can be quite diverse, the most common being parasitic invasions, drug allergies, smoking and Churg Straus syndrome. The response to corticosteroid therapy unveils distinct trajectories in the evolution of eosinophilic pneumonia, exemplified by the contrasting outcomes in these two cases.

Conclusion. Eosinophilic pneumonia should be suspected in any case with peripheral pulmonary consolidation and can occur on a background of asthma. The pulmonary lesions combined with peripheral eosinophilia and more important eosinophilia in the BAL can lead to a clear cut diagnosis of EP. Corticosteroids are the mainstay of the treatment and usually induces dramatic improvement.