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P1315 Eosinophilia: aetiologies and usefulness of biological investigations in a French hospital

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Background: A blood eosinophilia can be seen in a wide range of diseases, including infectious diseases, and the diagnosis process is often complex. We aimed to provide an overview of the etiologies of eosinophilia in our area (Grenoble University Hospital, French Alps), and to evaluate the usefulness of the biological investigations performed in cases of eosinophilia.

Materials/methods: We retrospectively included all adult patients attending the infectious disease unit and the internal medicine units between 2009 and 2015 with an eosinophilia ≥1 G/l (n=298, 129 women and 169 men). We consulted clinical data, biological data and the diagnosis made then.

Results: A diagnosis was made in 118 cases (39.6%). In 129 other cases (43.3%), the eosinophilia had not been taken in account (neither mentioned nor transcribed in the patient records). For those whose eosinophilia was investigated, the main identified causes were drug-related (24.5%, mostly β-lactams and allopurinol), infectious diseases (17.0%), allergies (8.2%), vasculitis (8.2%), autoimmune diseases (6.9%), malignant blood diseases (3.1%), and solid tumors (3.1%). Patients with a skin rash had their eosinophilia significantly more often investigated, and a diagnosis was significantly more often retained. Helminthic infections (21 cases) were mainly diagnosed in travelers (15/21), excepted for toxocarosis (3 non-travelers). 76 patients had a stool examination for helminthic infection, and 3 (3.9%) were positive (all in travelers). 391 serologies for helminthosis have been performed in 91 patients, and 7.9% were positive (all positive cases but 3 were travelers). Anti-neutrophil cytoplasmic antibodies (ANCA) were positive in 26/112 patients (23.2%) (14 for c-ANCA, with 6 vasculitis; and 12 for p-ANCA, with 3 vasculitis).

Conclusions: Drug-related eosinophilia is the main etiology; helminthosis are rare among non-travelers. Serological tests and stool examination are useful tests, but preferably for travelers (excepted *Toxocara* serology). ANCA should be performed early not to miss a potentially severe vasculitis.