Introduciton. It has been suggested that ear, nose, and throat (ENT) involvement in ANCA-associated vasculitis (AAV) may carry the advantage of earlier recognition of the systemic vasculitis. Alternatively, differences in histological findings between patients with MPO-ANCA and PR3-ANCA might represent different routes in the pathogenesis of vasculitic disease in these subsets of patients. This study investigates whether ENT involvement in AAV is associated with better renal function and histopathology than AAV without ENT involvement. 

Methods. Renal biopsies with ≥7 glomeruli were available from 152 newly diagnosed AAV patients from four international multicenter trials. Age, ENT involvement, ANCA type (PR3 or MPO), interstitial fibrosis and tubular atrophy (IFTA), tubulitis, interstitial infiltrates and the histopathologic classification of ANCA-associated glomerulonephritis (AAGN) were analyzed as candidate determinants of GFR at diagnosis (GFR0). The relation of GFR0, IFTA and the histopathological classification with ENT involvement was analyzed at the time of diagnosis.

Results. Sixty-four patients had ENT involvement at diagnosis, 88 patients had not. Multivariate analysis revealed that in combination with ENT involvement \( r = 0.25, P = 0.000 \), age \( r = -0.34, P = 0.000 \), IFTA \( r = 0.16, P = 0.001 \), tubulitis \( r = 0.16, P = 0.001 \), interstitial infiltrates \( r = 0.20, P = 0.000 \) and the histopathologic classification of AAGN \( r = 0.411, P = 0.000 \) were associated with GFR at diagnosis. Patients with ENT involvement had a higher GFR0 (60 mL/min versus 44 mL/min, \( P = 0.000 \)), less IFTA \( (P = 0.001) \) and a histopathologic more favourable class \( (P = 0.000) \) than patients without ENT involvement. Increasing numbers of active BVAS ENT parameters (range: 0–6) showed a high correlation with increased renal function at time of diagnosis \( (P = 0.000) \).

Conclusion. ENT involvement in AAV with renal disease is associated with better renal function and less severe histological renal injury, probably due to diagnosis before the development of irreversible chronic lesions.

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A28
Clinical evaluation of a rapid immunofluorescence test (IIFT) for diagnosis of ANCA-associated vasculitis

Radice 1, L. Bianchi 2, S. Glionna 2, B. Trezzi 2, C. Farina 1, R.A. Sinico 2
1. Microbiology Institute, San Carlo Borromeo Hospital, Milan, Italy
2. Nephrology and Clinical Immunology Unit, San Carlo Borromeo Hospital, Milan, Italy

Introduction. AAV, when untreated, generally follow a fatal progressive course so that early diagnosis is mandatory to allow timely treatment. Reliable laboratory methods for ANCA testing are essential to confirm diagnosis. Guidelines suggest combining IIFT and MPO/PR3-specific assays as the optimal strategy for ANCA detection. Aims of this monocentric, retrospective study were to evaluate:

- the diagnostic performance of a rapid ANCA kit (Europlus™);
- its usefulness in emergency clinical settings.

Methods. Sera from 107 AAV selected on the basis of clinical diagnosis, 123 pathological and 20 healthy controls were tested. Materials: Granulocytes Mosaic Europlus™ (Euroimmun); homemade ANCA-IIFT; ANCA-MPO/PR3 (Orgentec, direct ELISA). The Granulocytes Mosaic Europlus™ system is a IIFT assay where the slide wells (“biochips”) are coated with ethanol/formaline-fixed neutrophils and purified MPO/PR3 microdots (figure 1). The system allows the contemporary evaluation of IIFT and antigen-specific assays. The test is carried out as a classical IIFT and results are available in ~90’.

Results. Granulocytes Mosaic Europlus™ vs. standard methods:

- global IIFT concordance 88.7%;
- antigen-specificity (MPO/PR3) concordance 89.5%;
- diagnostic sensitivity 81.3%;
- diagnostic specificity 97.2%;
- total agreement (classification) 90.4%.

We also evaluated the clinical usefulness of such rapid test in critical settings. Of 13 consecutive samples from pts with severe kidney & lung involvement tested, 12/13 were correctly classified.

Conclusion. Our results show a good diagnostic performance of the Granulocytes Mosaic Europlus™, and its high concordance with the reference multi-testing algorithm.

A29
Prevalence of anti-neutrophil cytoplasmic antibodies in infective endocarditis: An analysis of 109 cases

1. Hospital Saint-Louis, Paris, France
2. Hospital Cochin, Paris, France
3. Hospital Bichat, Paris, France

Introduction. Sporadic reports have been published on positive ANCA tests in the context of infective endocarditis (IE) and combined with the multisystem protean presentation of IE, this situation may lead to inappropriate diagnosis and therapy. Because the frequency of ANCA in IE is unknown, we assessed the prevalence of ANCA in a relatively large number of cases with IE.

Methods. The study was conducted in the framework of an inception cohort of consecutive cases with IE launched in 2005 in a single university hospital. Sera were stored for all patients who gave informed consent for blood sampling. All selected sera were tested for ANCA in a central laboratory using indirect immunofluorescence (IIF) assays and ELISA for anti-proteinase 3 (PR3) and anti-myeloperoxidase (MPO) specificities by use of commercially available kits. In addition, the sera were tested for antinuclear antibodies (ANA) and antcardiolipin antibodies (aCL) by use of a commercially available IIF kits and for rheumatoid factor (RF) by use of an in-house test.

Results. Sera from 109 patients (82 [75%] men, mean age: 57.5 yrs [SD: 15.4]) were tested. All patients fulfilled Duke’s criteria for definite