Methods

incidence of change is not reported. The aim of this study was to

sometimes changes. Published data is limited to case reports and

verse were identified and case notes reviewed.

Patients that changed specificity from PR3- to MPO-ANCA and vice

performed. 9,838 also had both PR3/MPO-ANCA (6439 patients).

August 2012. A total of 22,002 IIF screens (14,518 patients) were

previously positive. We reviewed all ANCA results from January 2000 to

PR3/MPO-ANCA if positive or ANA present. Both tests are performed if

specificity changes in ANCA associated vasculitis

our centre. Their applicability in other settings (general hospitals) is

pending. We are evaluating such issue currently.

Reference

[1] Flahault A, Cadilhac M, Thomas G. Sample size calculation should be

performed for design accuracy in diagnostic studies. J Clin Epidemiol


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P5

Incidence of PR3- and MPO-ANCA autoantibody specificity changes in ANCA associated vasculitis

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Introduction. – Monitoring of ANCA associated vasculitis (AAV) in remis-
sion usually includes indirect immunofluorescence (IIF) and PR3/MPO-
ANCA. Typically, PR3/MPO-ANCA are both performed as specificity
sometimes changes. Published data is limited to case reports and
incidence of change is not reported. The aim of this study was to
quantify the incidence of antibody switching.

Methods. – We serve a population of 720,000. IIF is used with reflex
PR3/MPO-ANCA if positive or ANA present. Both tests are performed if
previously positive. We reviewed all ANCA results from January 2000 to
August 2012. A total of 22,002 IIF screens (14,518 patients) were
performed. 9,838 also had both PR3/MPO-ANCA (6439 patients).
Patients that changed specificity from PR3- to MPO-ANCA and vice
versa were identified and case notes reviewed.

Results. – Two hundred and fifty patients positive for PR3/MPO-ANCA
were followed for a mean of 2.4 years (range < 0.1 to 12.4 years; with
177 patients followed for > 90 days). Five patients (2%) changed
antibody specificity during follow up (three GPA, one MPA & one
AGP). In two of these patients this was associated with relapse.

The incidence of specificity change was one per 66 years (including
reversion to original specificity) and one per 199 years if only events
associated with a rising CRP/relapse are considered.

Discussion. – In the five cases, we observed two were associated with
relapse (and raised CRP). In two further patients switching was at low
level, transient and was not considered clinically significant. If only the
original antibody specificity was used in monitoring patients we would
have missed a clinically significant event once every 199 patient years.

Conclusion. – We have shown that antibody specificity changes in AAV
are rare. We show that monitoring using only the initial antibody
specificity would have resulted in missed clinical events but CRP
presaged relapse in these cases. Decisions on the optimum monitoring
strategy require assessment of cost and benefit.

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P6

Multi-center evaluation of a novel chemiluminescent rapid assay for the detection of PR3-ANCA

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Introduction. – Anti-PR3 antibodies represent an established and
widely applied marker for the diagnosis of small vessel vasculitis,
such as granulomatosis with polyangitis (GPA). This multi-center
study was designed to critically analyze the performance of QUANTA
Flash PR3, a chemiluminescent immunoassay (CIA) on a random
access rapid response (30 min) auto-analyzer for the detection of
anti-PR3 antibodies, by testing a large number of samples from
multiple clinical sites, selected samples in comparison to EliA PR3s
(Thermo Scientific).

Methods. – Sera from 292 GPA patients and other diseases (n = 1356)
were collected from 11 different laboratories in multiple countries
(Germany, Italy, The Netherlands, Slovenia, France, Canada, Belgium,
Poland, Austria) and tested by QUANTA Flash PR3. A total of 196
samples in two sites were also tested by EliA PR3s.