Conclusions

Patients with sarcoidosis have a heightened CRS. This was increased to a greater degree in females, but age or radiographic stage were recorded. The effects of gender, age, ethnicity, radiographic stage and serum ACE levels on cough reflex sensitivity were investigated. CRS data of 134 healthy subjects from a previous study were used for comparison (Prudon et al, Chest 2005;127:550).

Results

CRS was heightened in patients with sarcoidosis compared to healthy subjects (geometric mean (logSD) C5 13.5 (0.5) vs 158.5 (0.6) µmol/l, p<0.001). Female patients had a more sensitive cough reflex compared to males (geometric mean (logSD) C5 8.1 (0.5) vs 31.8 (0.5) µmol/l, p=0.007). Seven patients did not complain of cough; there was no difference in CRS compared to patients who reported cough (p=0.68). There was no difference in CRS between patients of Afro-Caribbean origin compared to non-Afro-Caribbean patients (geometric mean (logSD) C5 10.1 (0.5) vs 24.3 (0.6) µmol/l, p=0.09).

Serum ACE levels correlated significantly with logC5 (r=0.74, p<0.001), with lower ACE levels being associated with a more sensitive cough reflex. There was no relationship between logC5 and age (r=-0.40, p=0.054) or radiographic stage (p=0.85).

Conclusions

Patients with sarcoidosis have a heightened CRS. This was increased to a greater degree in females, but age or radiographic stage had no effect. We report for the first time a link between serum ACE levels and cough reflex sensitivity, and hypothesise that low concentrations of serum ACE lead to increased airway tussigenic mediators such as bradykinin. Further studies should investigate whether cough receptors such as TRPV1 are upregulated in sarcoidosis.
S137 The natural history of IPF in patients eligible for clinical trials vs patients not eligible


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