P2X3: A NEW TARGET FOR TREATING CHRONIC COUGH

A substantial proportion of patients with chronic cough (lasting longer than 8 weeks) have no obvious cause after extensive investigation and their symptoms persist despite commonly prescribed antitussive medication. P2X3 receptors are expressed by airway vagal afferent nerves and contribute to the hypersensitisation of sensory neurons. This randomised, double-blind, placebo-controlled UK based phase II study (Lancet, doi: 10.1016/S0140-6736(14)61255-1) aimed to investigate the efficacy of a first-in-class oral P2X3 antagonist, AF-219, to reduce cough frequency in patients with refractory chronic cough. After 2 weeks of treatment, cough frequency was reduced by 75% when patients were allocated to AF-219 compared with placebo (p=0.0003). Taste disturbance was significantly more frequent in AF-219 compared with placebo (p=0.005) and sublobar surgical resection (p=0.005) were independent negative prognostic factors; for LCNCs, only pTNM stage III tumours (p=0.016) negatively affected outcome in the multivariate analysis. LCNC affects more predominantly men and smokers, and occurs in patients older than those with ACs. Local recurrences and distant metastases developed in 93 patients and were statistically more frequent in LCNCs.

CHEST CT FINDINGS IN HIV-INFECTED INDIVIDUALS IN THE ERA OF ANTIRETROVIRAL THERAPY

Advancements in antiretroviral therapy (ART) have led to chronic comorbidities of HIV becoming more common as the life expectancy of those with HIV has increased. Studies in HIV-infected individuals before the introduction of ART reported a high prevalence of radiographic abnormalities such as nodules, ground-glass opacities and intrathoracic lymphadenopathy. Often, these abnormalities were associated with past or chronic infections. This study (PLOS One, doi:10.1371/journal.pone.0112237) assessed the prevalence and nature of radiographic abnormalities on chest CT examinations in a HIV-infected population, without acute respiratory illness, in the current ART era. The majority of participants (5.4%) had a radiographic abnormality with the most common being emphysema (26.4%), nodules (17.4%) and bronchiectasis (10.7%). Age, smoking history and pneumonia were significant predictors of having any radiographic abnormality, but HIV-specific factors (use of ART, CD4 cell count, HIV viral load) did not seem to predict risk.

Competing interests None.
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