



## AB028. 195. Temporal arteritis: can duplex ultrasound replace temporal artery biopsy?

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**Background:** The diagnosis of temporal arteritis remains controversial. Despite its poor sensitivity and invasive nature, temporal artery biopsy is still considered the gold standard investigation for diagnosis. This has led to many recent efforts to find a more appropriate alternative.

**Methods:** A retrospective review was carried out on all patients referred to the vascular service with queried temporal arteritis from February 2010 to July 2017. Where possible, American College of Rheumatology (ACR) scores were calculated for each patient based on clinical details provided

in online referrals. For patients that had both biopsy and duplex ultrasound scan, the results of each were compared.

**Results:** A total of 90 patients were referred to the vascular service with a possible diagnosis of temporal arteritis. Of these, 71 had temporal artery biopsies, 8 of which were positive (11.27%); 51 patients had duplex ultrasound scan, of which 11 were positive (21.57%); 32 patients had both investigations carried out; 4 of these patients had a positive duplex and a positive biopsy. In 21 patients, both tests were negative. The seven remaining cases yielded inconsistency between both results.

**Conclusions:** Duplex ultrasound, with its increased sensitivity compared to temporal artery biopsy, may aid in the diagnosis of temporal arteritis and reduce the need for invasive temporal artery biopsy.

**Keywords:** Artery; biopsy; duplex; giant; temporal

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