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Patients with atrial fibrillation (AF), an irregular heartbeat, have greater risk of heart failure and stroke, and an increased mortality.

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The authors used data representative of the UK population to examine the risk of AF in gout patients compared to matched controls.

Impact of Gout on the Risk of Atrial Fibrillation

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- Patients with atrial fibrillation (AF), an irregular heartbeat, have greater risk of heart failure and stroke, and an increased mortality.
- Stroke and many predictors for AF, such as excess uric acid in the blood (hyperuricaemia), are also common co-morbidities in gout patients, suggesting a possible link.
- The authors used data representative of the UK population to examine the risk of AF in gout patients compared to matched controls.
Findings:

- Data was obtained for 45,378 patients with gout. They consumed more cigarettes and alcohol, had a higher BMI, and had higher prevalence of cardiovascular conditions than controls.

- Patients with gout had an adjusted OR (odds ratio – the association between exposure and outcome) of 1.45 (95% CI 1.29, 1.62), meaning they had a significantly higher likelihood of AF at time of initial diagnosis compared to controls.

- Gout patients also had a significantly higher probability of AF at 1, 2, 5 and 10 years after the time of initial diagnosis compared to controls (adjusted OR 1.09 [1.03, 1.16]).

- For example, after a median follow-up of 9 years, 3,534 gout patients had developed AF, compared to 2,322 control patients.

- Gout remained independently associated with AF, even when controlling for known predictors, other comorbidities, and medication use.

- The absolute risk of AF in gout patients is around 60% greater than matched controls.

Recommendations for Practice

Gout is independently associated with a higher risk of atrial fibrillation at diagnosis, and up to ten years later. Electrocardiogram should be part of the initial assessment for gout patients at diagnosis.

Reference:


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What is NIHR CLAHRC West Midlands?

The Collaborations for Leadership in Applied Health Research and Care (CLAHRC) is a partnership between universities (Birmingham, Warwick, Keele and Aston) and a number of health and social care organisations in the West Midlands. We are funded by the National Institute for Health Research with a mission to undertake high-quality applied health research focused on the needs of patients to improve health services locally and beyond. For further information, visit: www.clahrc-wm.nihr.ac.uk

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