Light-moderate alcohol consumption and risk of atrial fibrillation
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Background

Compelling evidence suggests that excessive alcohol consumption increases the risk of atrial fibrillation (AF), but the effect of light-moderate alcohol consumption is uncertain. We aimed to investigate the association of light-moderate alcohol consumption within recommended limits with AF risk.

Methods and Results

Among 47,002 participants with information on alcohol and free from AF in the HUNT3, a population-based cohort study conducted between 2006 and 2008 in Norway, we identified
1,697 validated diagnoses of AF until 30 November 2015. Average alcohol consumption was 3.8 ± 4.8 gram per day in the population. Average quantity of alcohol consumption was associated with increased risk of AF in a curvilinear manner, with increasingly steep risk increases with heavier alcohol intake above 7 drinks per week. The multivariable-adjusted hazard ratio for those who reported more than 7 drinks per week consumption was 1.38 (95% CI: 1.06-1.81) compared to long-term non-drinkers. However, the proportion of the population risk of AF attributable to consumption within recommended limits and without binge- and problem drinking was only 0.2% (95% CI: -1.0%, 1.4%).

Conclusions
Alcohol consumption was associated with a curvilinearly increasing risk on AF, but we observed no increased risk among individuals who reported alcohol intake within the recommended limits without binge- or problem drinking.

Key messages:
- Alcohol consumption was associated with a curvilinearly increasing risk on AF.
- We found no increased risk among individuals who reported alcohol intake within the recommended limits without binge- or problem drinking.