Use of anti-androgenic 5α-reductase inhibitors and risk of oesophageal and gastric cancer by histological type and anatomical sub-site

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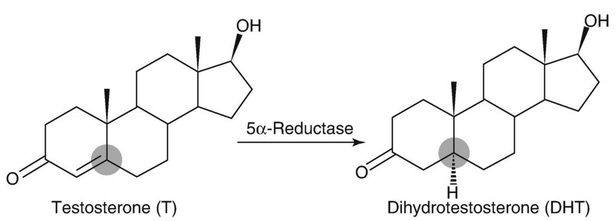
Conclusion

Users of 5-ARIs may have a decreased risk of developing oesophageal or cardia adenocarcinoma, particularly in those with obesity or diabetes, as well as a decreased risk of oesophageal squamous cell carcinoma and possibly also of gastric non-cardia adenocarcinoma.

Introduction

It has been suggested that sex hormones have a role in the aetiology of oesophageal and gastric tumours. Whether the anti-androgenic medications 5α-reductase inhibitors has an affect on the risk of developing such tumours is still unknown.



Aim

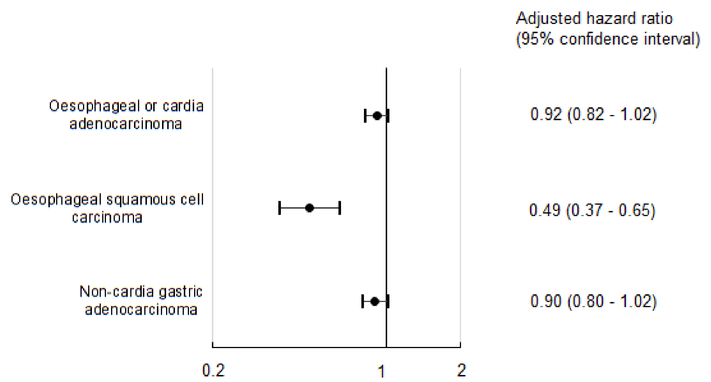
To investigate if anti-androgenic medications 5α-reductase inhibitors (5-ARIs) decreases the risk of developing oesophageal and gastric tumours.

Method

A Swedish population-based cohort study between 2005-2018 where men using 5-ARIs were considered exposed. For each exposed participant, 10 male age-matched non-users of 5-ARIs (non-exposed) were included. Multivariable Cox regression provided hazard ratios (HR) with 95% confidence intervals (CI) adjusted for age, calendar year, smoking status, non-steroidal anti-inflammatory drugs/aspirin use, and statins use. Further adjustments were made depending on the tumour analysed.

Results

The cohort included 191,156 users of 5-ARIs and 1,911,560 non-users. Use of 5-ARIs indicated slightly decreased risks of oesophageal or cardia adenocarcinoma (HR 0.92, 95% CI 0.82-1.02), which was stronger among participants with obesity or diabetes HR 0.55, 95% CI 0.39-0.80), and gastric non-cardia adenocarcinoma (adjusted HR 0.90, 95% CI 0.80-1.02). Use of 5-ARIs was associated with a reduced risk of oesophageal squamous cell carcinoma (HR 0.49, 95% CI 0.37-0.65).



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