Does Metformin Slow AAA Growth?
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VEITH 2016 Session 84
Disclosures: None

Phenotypic heterogeneity

Diabetes suppresses AAA

Hyperglycemia effect?

Medications?
Cardiovascular drugs - Class/type?
Diabetic drugs – Class/type?
  Thiazolidinediones – Cockerill Group/St. Georges London 2013
  Insulin?
  Metformin?
STRIDE-determined cohort

819 diabetic AAA patients since 2003
58 with at least 2 serial CT scans, ≥ 6 months
CT imaging maximizes precision, reproducibility
Excluded syndromic aortic diseases (Marfans, EO Type IV, etc.)
Aortic diameter abstracted from imaging reports
Clinical/demographic/CV risks from STRIDE
Medication history from Pharmacy records (STRIDE)

Metformin suppresses AAA

Representative histology

First publication
Taiwanese health system

Association between use of oral-antidiabetic drugs and the risk of aortic aneurysm: a nested case-control analysis

May 31st to June 2nd at the San Diego Convention Center

Abstract deadline 1.25.2017

3 Australian cohorts

Table 3: Association analyses of aortic aneurysm with OADs. AORs are given in three different patient cohorts.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>AOR</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>2.34</td>
<td>1.50-3.66</td>
<td>0.002</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>1.80</td>
<td>1.20-2.68</td>
<td>0.004</td>
</tr>
<tr>
<td>Cohort 3</td>
<td>2.20</td>
<td>1.40-3.47</td>
<td>0.001</td>
</tr>
<tr>
<td>Cohort 4</td>
<td>2.00</td>
<td>1.30-3.09</td>
<td>0.003</td>
</tr>
</tbody>
</table>

*95% Confidence intervals; OADs: oral antidiabetic drugs. "*" denotes statistical significance (p < 0.05) after Bonferroni correction for multiple testing. Bold text indicates main exposure of interest; italic text indicates confounders. All outcomes adjusted for age, sex, smoking status, systolic blood pressure, body mass index, and other cardiovascular risk factors.