Epidemiology of Hepatitis E in Bavaria Germany

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Introduction

- Hepatitis E virus (HEV) is a non-enveloped, single-stranded RNA virus
- Genotype 3 is the most widespread genotype in Germany
- The prevalence of antibodies against HEV in Germany is 16.8%
- Genotype 3 has a zoonotic character and has been detected in several animal species (e.g. pigs, wild boars, deer and rabbits) and humans

Objectives

- Describe the population diagnosed with HEV in Bavaria
- Identify the most common subgenotypes of HEV circulating in Bavaria
- Identify the risk factors associated with transmission of HEV genotype 3

Methods

- Descriptive analysis for Bavarian’s HEV cases
- Sequencing to subgenotypes
- Univariable analysis and Logistic Regression

Results

<table>
<thead>
<tr>
<th>Gender</th>
<th>Women (n=66) mean age 46 years (20-74)</th>
<th>Men (n=69) mean age 47.5 years (20-85)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms</td>
<td>No significant difference in the mean age between men and women (t-test and ANOVA)</td>
<td></td>
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<tr>
<td>Cases with symptoms (n=79/59%)</td>
<td></td>
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<tr>
<td>Subgenotyping</td>
<td>No significant difference in the presence of symptoms between women and men (Chi-square-test)</td>
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<td>Stool and serum samples (n=145), food samples sent to LGL (n=6)</td>
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<td></td>
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</tbody>
</table>

Risk factors I

- Positively associated with hepatitis E:
  - Consumption of sausages (e.g. salami, liver sausages)
  - Consumption of fish (e.g. pollack, trout)
  - Owning a cat

Risk factors II

- Protective factor for hepatitis E:
  - Consumption of raw vegetables

No association with hepatitis E:
- Consumption of meat like pork, beef and wild meat
- Consumption of ham
- Owning a dog

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References

1. Robert Koch Institute, German health interview and examination survey for adults (DEGS1). Robert Koch Institute, Department of Epidemiology and Health Monitoring, 2015.