Group A Subgroups

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A Subgroups

- 38% of Australia population are grp A
- 1911 von Dungern described 2 different A antigens
- Most common are A1 and A2 sub groups
- Also includes A3, Ax, Aend, Am, Ay, and Ael
Case Study

- 71 YO male Pre Admission
- Blood Analyser: Forward group O Back Group A
- Tube at RT IS: Anti A: 0 A1 cells: 0
- Tube RT 10 min: Anti A: MF1 Micro A1 cells: 0
- End result: A Subgroup Rh(D) Pos
- Red Cross suspects A end Subgroup
## Grouping Reactions

<table>
<thead>
<tr>
<th>Method</th>
<th>Anti-A</th>
<th>Anti-B</th>
<th>A1 cells</th>
<th>B cells</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube Immediate Spin</td>
<td>Neg</td>
<td>Neg</td>
<td>Neg</td>
<td>4+</td>
<td>Indeterminant</td>
</tr>
<tr>
<td>Tube 10mins @ RT</td>
<td>0.5 MF</td>
<td>Neg</td>
<td>Neg</td>
<td>4+</td>
<td>? weak A subtype</td>
</tr>
<tr>
<td>Analyser</td>
<td>Neg</td>
<td>Neg</td>
<td>Neg</td>
<td>4+</td>
<td>Indeterminant</td>
</tr>
</tbody>
</table>
A end Subgroup

- Demonstrates mixed field agglutination with anti-A and anti-AB
- Affects ~0.003% of the population of Group A patients
- No clinical significance
References


- Initial testing was performed at Sydpath Pathology at St Vincent’s Hospital, Sydney
Uh, no, Mr. Vance. "AB caffeinated" is not a blood type.