ABO Blood Groups
And Diseases

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Summary

Diseases associated with Blood groups showed that hypertension was more common in group 'O' people.

Ischemic heart disease was commonly seen in group 'A' people and males were the common victims. Diabetes melilitis was more common in Group 'O' people and females were the common sufferers.

Introduction

There is an interesting association of ABO Blood groups with diseases. It has been established that many micro-organisms have A-like, B-like or AB-like serological specificities and so persons with group A, B or AB are more susceptible to infections. This is a well known fact that peptic ulcer is more common in group 'O' individuals. The study of R.B. KC. Connel shows that Diabetes mellitus is more common in group A and AB individuals. Allen did study on patients with Myocardial infarction and found that group 'A' people were the maximal sufferers.

Material and Methods

Blood samples were collected from patients suffering from Diabetes mellitus, Hypertension and Ischemic heart disease from different hospitals in Lahore. The following particulars were noted:- Name, Age, Sex, Address, Occupation, Existence of a present or past D.U., Family history for Diabetes, Hypertension or I.H.D. in near relatives.

Disposable syringes were used and 5 ml blood was collected. Serum and cells were separated and tests for

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ABO and Rh grouping were performed. The method adopted was that of Dacie and Lewis\(^5\).

**Results**

Out of the 174 cases observed, 82 were having Hypertension with cholesteremia, 70 had diagnosed I.H.D. and 22 belonged to established Diabetes mellitis. The results are shown in Table-I.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Hypertension</th>
<th>Diabetes Mellitis</th>
<th>I.H.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blood group</strong></td>
<td>A  B  O  AB</td>
<td>A  B  O  AB</td>
<td>A  B  O  AB</td>
</tr>
<tr>
<td>Males</td>
<td>12  14  16  8</td>
<td>6  2  6  2</td>
<td>20  14  18  4</td>
</tr>
<tr>
<td>Females</td>
<td>4  6  18  4</td>
<td>14  4  6  2</td>
<td>6  6  2  0</td>
</tr>
<tr>
<td>Total</td>
<td>16  20  34  12</td>
<td>20  6  12  4</td>
<td>26  20  20  4</td>
</tr>
</tbody>
</table>

**Discussion**

Study was done on 174 cases suffering from Hypertension, Ischemic heart disease and Diabetes mellitis. It was observed that the maximum cases of Hypertension belonged to blood group ‘O’; next common was group ‘A’.

In case of Ischemic hear disease, maximum cases belonged to group ‘A’ which shows a similarity to study done by Allen\(^4\). Brain Maurer did similar study but found no appreciable difference in frequency amongst the various blood groups\(^6\). The interesting observation in this study was that maximum males were suffering from this condition. Females were only 20%.
In case of Diabetes mellitus, the majority of sufferers were females and the commonest group involved was 'A' which shows a similarity to study done by Me Connel'.

References


