

Does hypotension occur in Blood donors?-A pilot study in a rural blood bank.

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Background:

The aim of this study was to investigate the occurrence of hypotension in the post donation period among donors of a rural blood bank.

Study design and methods:

In this study, Hypotension has been defined as decrease of more than 20mm Hg in systolic or 10 mmHg diastolic pressure compared to the predonation Blood Pressure (BP). A total of 300 voluntary walk-in blood donors were included in this study. The BP was monitored during three

phases viz predonation, immediately after donation and after 10 minutes.

Results and analysis:

In our analysis 51% of donors were seen in the 3rd decade and 36.3% of the donors were first time donors. Immediate hypotension was observed in 23.4% whereas 59.34% were observed to have hypotension 10 minutes after donation. Among first time donors, 32.11% were observed to have hypotension after 10 minutes of donation. Only 1.8% of the donors had vasovagal symptoms in whom a reduction of 30 -35 mmHg systolic pressure was observed.

| Comparison of Decrease in Blood Pressure between First time and Repeat Blood Donors (Immediate post donation and 10 min post donation) | | | | Decrease in Blood Pressure in total number of donors (Immediate post donation and 10 min post donation) | | | | |
|--|------------------|------------------|--------|---|--------------|--------|--------------|---------|
| Percentage | First Time Donor | Immediate | 32.11% | Repeat Donor | Immediate | 23.71% | After 10 min | |
| | | After 10 min | 27.23% | | After 10 min | 59.34% | | |
| | Percentage | First Time Donor | 70.00% | Repeat Donor | Immediate | 60.00% | After 10 min | -10.00% |
| | | | 60.00% | | | 50.00% | | |
| | | | 50.00% | | | 40.00% | | |
| | | | 40.00% | | | 30.00% | | |
| | | | 30.00% | | | 20.00% | | |
| | | | 20.00% | | | 10.00% | | |
| | | | 10.00% | | | 5.00% | | |
| | | | 5.00% | | | 0.00% | | |

Conclusion:

More than half of the donors were observed to have hypotension 10 minutes after blood donation and is seen more among first-time donors. Hypotension and vasovagal syncope should be addressed to increase donor pool. Although the number of donors who developed disturbances in relation to donating blood was very low, it is nevertheless desirable to reduce risks to a minimum, working not only with the maximum environmental safety, but also with complete medical assistance.

Awareness among blood bank staff will ensure that they are sensitive to these adverse effects.

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