

Correlation Between IPF & PLT Count in Eastern Population

Background

Eastern population is known to have large platelets, resulting in variable reference ranges from rest of India populations. Hence it is required to get a correlation between IPF, a known parameter to represent bone marrow response to thrombocytopenia and PLT count.

It is necessary to study the correlation between IPF and PLT, at various levels of PLT count and established a biological reference range for IPF population specific.

Objective

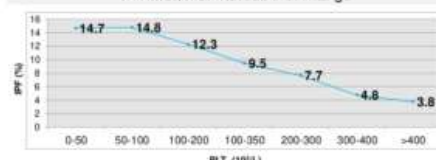
- To study correlation between IPF and PLT, at various levels of PLT count
- To establish a biological reference range of IPF for eastern population specifically.
- To correlate with other platelet parameters MPV and PDW

Materials

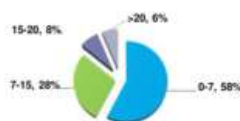
Test parameters	Performed using
Optical Platelet, IPF, MPV, PDW	Mindray BC-6800 hematology analyzer

Results

IPF Mean for various PLT Range

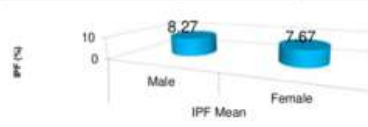


Eastern Population (PLT > 150, IPF range)



IPF values of patients ranged from 8% to 58%, with mean of 13.5% and SD of 7.2

Eastern Population (PLT > 150 x 10⁹/L)



Eastern Population (PLT > 150 x 10⁹/L)

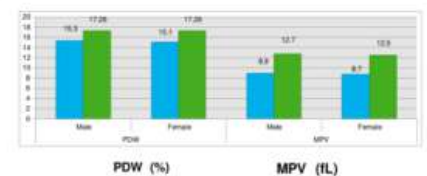


Results (continued)

Eastern Population (PLT > 150, M & F range)



Eastern Population (PLT > 150, M & F range)



Conclusion

- The Immature Platelet Fraction in eastern population ranges from 0.03 to 15.3 with a mean of 8.0 which is higher as compared to other studies.
- This could be related to a inherent population of low platelet counts and large platelets in the eastern region.
- This would also help to conduct further studies to study the utility of IPF in Thrombocytopenia and Sepsis.

Glossary

- IPF: Immature Platelet Fraction
- PLT-O: Optical Platelet count in Reticulocyte channel
- PDW: Platelet distribution Width
- MPV: Mean Platelet Volume