Study of normal values in coagulation profile

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Abstract

The objective of the present work was to study normal values of hemostasis parameters in healthy volunteers using Behring Coagulation Timer (BCT). Plasma was divided into 2 parts fresh plasma and lyophilized plasma. It was found that the mean ± SD of prothrombin time (PT) and activated partial thromboplastin time (APTT) in fresh plasma (n=37) were 11.95 ± 0.7 and 40.52 ± 5.30 seconds respectively. The means ± SD of coagulation factors I, II, VII, VIII and IX were 2.55 ± 0.73 g/l (n=36), 82.28 ± 10.28 per cent (n=37), 82.79 ± 19.36 per cent (n=32), 89.13 ± 24.17 per cent (n=37), 94.11 ± 16.29 per cent (n=31) respectively. The normal ranges (P5-P95) of PT, APTT and coagulation factors I, II, VII, VIII and IX were 10.8-13.3 sec, 31.4-48.0 sec and 1.82-4.65 g/l, 64.83-96.5 per cent, 46.88-127.61 per cent and 67.87-116.94 per cent respectively. Comparison of PT, APTT between fresh plasma and lyophilized plasma were statistically different (Wilcoxon match-pair signed rank test, p<0.05), while F I, II, VIII and F.IX in fresh plasma were increased more significantly than lyophilized plasma.

Keywords : Factor Assay; Screening Coagulogram

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