

Platelet functions in patients with meningococcal meningitis at the Kenyatta National Hospital, Nairobi

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Abstract:

Objective: To determine platelet abnormalities in patients with meningococcal meningitis. **Design:** Case control study. **Subjects:** Fifty seven cases of meningococcal meningitis based on a cerebrospinal fluid gram stain for gram negative diplococcus or positive culture were recruited. Fifty-seven controls matched for age and sex were also recruited. The following platelet functions tests were performed; platelet counts, platelet adhesiveness, platelet aggregation and clot retraction. **Results:** Fifty seven patients (41 males and 16 females) with meningococcal meningitis were studied. Their mean age was 25.5 ± 8.32 years with a range of 15 to 45 years. Five patients had purpura, four peripheral gangrene, eight conjunctival hemorrhages and one was in shock. There was a statistical significant difference in the platelet aggregation and clot retraction between the patients and controls at p-values of 0.0001 and 0.0002 respectively. There was no significant difference in the platelet count and adhesiveness between the patients and the controls at a p-value of 0.203 and 0.22 respectively. No association was found between the platelet functions and the clinical presentations. **Conclusion:** Patients with meningococcal meningitis have abnormalities in the platelet functions mainly in aggregation and adhesiveness