SUMMARY AND CONCLUSIONS
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Present study was conducted in 60 patients undergoing for different surgical procedures under different anaesthetic agents. The granulocytic adherence was assayed and control sample was compared to other samples taken at 30 minutes after induction of anaesthesia, at the time of recovery from anaesthesia and 24 hours after surgical procedure. To know the effect of different anaesthetic agents different groups comparison were made.

The technique described by Klempner and Gallin (1979) with minor modification was used in the laboratory for determination of granulocytic adherence.

All the patients were grouped at random into 5.

1st group was given spinal subarachnoid block with 5% xylocaine. In this group, mean granulocytic adherence was 87.66 ± 3.41 in control sample. In II, III and IV sample, it was 86.65 ± 3.86, 85.32 ± 6.02 and 86.74 ± 3.69 respectively. It shows generalized reduction in adherence in all the sample.
When sample I was compared to II, III & IV separately, it showed statistically significant (\(P \leq 0.005\), \(P \leq 0.05\), \(P \leq 0.01\)) values.

IIInd group was given spinal sub-arachnoid block with 1% Marcaine. The mean percentage of adherence was 89.94 ± 1.95 and in II, III and IV sample it was 88.72 ± 2.24, 88.34 ± 1.87 and 88.37 ± 1.71 respectively. Again it shows generalized reduction in granulocytic adherence in all the samples taken at different times. Then control sample was compared to other samples in the same manner as in group I. It yielded again statistically significant values (\(P \leq 0.05\), \(P \leq 0.001\), \(P \leq 0.02\)).

Group III - These patients were induced with Thiopentone sodium + scoline and maintained with \(N_2O/C_2/Flaxedil\). Mean granulocytic adherence in control sample was 91.04 ± 2.12. It was 84.76 ± 4.54, 82.12 ± 3.98 and 86.37 ± 2.66 in II, III and IV sample respectively. Again control sample was compared to II, III and IV sample separately which showed statistically highly significant (\(P \leq 0.001\)) decrease in granulocytic adherence.

Group IV - Induction was done with Thiopentone sodium + scoline and maintenance with \(N_2O/C_2/Ether\).
Mean granulocytic adherence in control sample was 90.12 ± 2.78. It was 84.85 ± 3.33, 84.68 ± 3.37 and 87.76 ± 3.32 in II, III and IV sample. Comparison showed highly significant (P < 0.01) decrease in granulocytic adherence.

Group V - Received general anaesthesia having induction with Thiopentone sodium + scoline and maintenance with N₂O/O₂/Halothane. Mean percentage of granulocytic adherence was 90.03 ± 1.14 in control sample. Comparison of different samples with control sample yielded highly significant (P < 0.001) decrease in granulocytic adherence at different times.

For knowing the effect of different anaesthetic agents on granulocytic adherence group I was compared with group II, III, IV and V which showed insignificant value. But when group II (Marcaine) was compared with group III, IV and V separately, it showed significant difference.

The following conclusions were drawn from the present study.

1. A decrease in granulocytic adherence was found
   - 30 minutes after induction,
   - Just after recovery from anaesthesia, and
   - 24 hours after surgical procedure.
2. Decrease in granulocytic adherence was found under the influence of all the anaesthetic agents used - Xylocaine 5%,
   - Marcaine 1%,
   - Thiopentone + scoline — N₂O/O₂/Flaxedil,
   - Thiopentone + scoline — N₂O/O₂/Ether,
   - Thiopentone + scoline — N₂O/O₂/Halothane.

3. Decrease in granulocytic adherence was less when Marcaine 1% was used in subarachnoid block in comparison of general anaesthesia (Thiopentone + scoline — N₂O/O₂/Flaxedil, Thiopentone + scoline — N₂O/O₂/Ether, Thiopentone + scoline — N₂O/O₂/Halothane).