

## **SUMMARY**

1. Two thousands and eight hundred surgical patients referred for pre anaesthetic evaluation for various surgical procedures were enrolled for the study.
2. Three hundred and ninety two patients (14%) were found to be suffering from sleep apnoea syndrome diagnosed on the basis of clinical criteria.
3. The diagnosis of sleep apnoea syndrome was confirmed by night polysomnography. Out of 392 patients, 180 patients (45.91%) were found to have sleep apnoea syndrome. Out of 180 patients, 150 patients (38.26%) were confirmed as a case of obstructive sleep apnoea syndrome. Out of 150, majority of patients (127), had mild to moderate severe disease based on apnoea index. Age range was 30 - 70 years and weight range was 38 – 82 Kg.
4. Incidence of sleep apnoea syndrome out of 2800 surgical patients was 5.35% as compared to 1-8% as reported by various western studies in general population.
5. One hundred and fifty cases of obstructive sleep apnoea syndrome were divided randomly into three groups consisting of 50 patients each. Control group received Inj Ketorolac 30 mg intramuscularly 2 hours before surgery whereas study groups S1 & S2 received Inj Morphine sulphate 0.10 mg and 0.15 mg /kg body weight intramuscularly respectively 2 hours before surgery.
6. Patients were monitored continuously following premedication with continuous ECG, pulse oximetry and non-invasive blood pressure. The changes in heart rate, blood pressure, arrhythmias and arterial oxygen saturation were observed. Other parameters like respiratory rate, sedation scale were also observed and recorded.

7. Results were compared between control group and study group S1 and S2 group. Though heart rate changes seen in control group were statistically significant but not clinically significant. However as regards cardiovascular changes there was no statistically significant difference between the three groups except heart rate falling to 60/min or below in 8(16%) patients in S2 group as compared to control group, 2(4%) patients ( $P=0.045$ ). There was no statistically significant difference between S1 and S2 group. There was also no statistically significant difference between the three groups as regards to incidence of cardiac arrhythmias.
8. The significant respiratory depression requiring respiratory support was seen in 4(8%) patients in S2 group of patients. One patient also had respiratory obstruction requiring active respiratory management including CPAP therapy. In control group, none of the patient had respiratory complication yet the difference between the control group and S2 group was not significant statistically. Similarly in S1 group, respiratory complications were seen in 3 patients(6%) that was not statistically different but obviously difference was clinically significant.
9. No statistically significant difference was found in cardiovascular and respiratory parameters between S1 and S2 groups.