



## Children Sedation during Gastrointestinal Endoscopy Comparison of Two Methods

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### **Introduction:**

Endoscopy is an invasive and painful procedure in children. Since children can not tolerate pain and stress, sedation is necessary in pediatric endoscopy. The aim of this study was comparison of propofol versus intravenous midazolam for reducing anxiety in children.

### **Materials and Methods:**

In this study, 103 patients (2-14 years old) in whom endoscopy was indicated were divided into three groups. In the first group, patients received propofol, in the second group, intravenous midazolam was given and patients in the third group received no sedation. Procedures were performed in the endoscopy room. Heart rate, respiratory rate and oxygen saturation were recorded before and during endoscopy in 1 minute intervals. Tremor, sweating and pain scores were recorded by using Visual Analogue Scale (VAS).

### **Results:**

A significant increase in heart rate was documented in all groups ( $P=0.038$ ). Respiratory rate also increased in all groups. Too Oxygen saturation decreased in the propofol group, but it was not statistically significant ( $P=0.17$ ). Pain score in propofol group was significantly lower than those receiving midazolam ( $20\pm 22$  vs  $50\pm 27$ ,  $P<0.001$ ). No noticeable side effect was seen in the propofol group.

### **Conclusion:**

It seems that propofol is a very useful and effective drug for reducing pain and stress in children and its administration leads to a safe sedation in pediatric endoscopy.

**Keywords:** Endoscopy, Propofol, Midazolam, Sedation.

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