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## **Perception of pain as a result of orthodontic treatment with fixed appliances**

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### **ABSTRACT**

The aims of this study were to investigate the intensity, location and duration of patients' discomfort following insertion of orthodontic appliances, and to examine for interactions between patient age, gender, appliance type and the perception of pain. After insertion of orthodontic appliances, 170 patients received eight questionnaires, one they completed and returned after 4 h, then one daily for 7 days. The respondents' ages ranged from 8-53 years (median age 13 years 7 months); 45 per cent were male and 55 per cent female. Of the patients, 65 per cent reported pain after 4 h and 95 per cent after 24 h. After 7 days, 25 per cent of the patients still reported discomfort. Patients' pain intensity scores were significantly higher for the anterior than for the posterior teeth. On day 1, 16 per cent took analgesics and 18 per cent reported being awakened the first night. Comparing a 2 x 4 appliance, a full appliance in one arch and in both arches, no statistical differences were found for reported pain frequency, general intensity of pain, pain at the teeth, discomfort when biting and chewing and analgesic consumption. The perception of general pain intensity, analgesic consumption, pain when eating and the influence of discomfort on daily life were all significantly greater in girls than in boys. Patients younger than 13 years reported pain significantly less frequently than the older patients. The highest frequency of pain was found in the group of 13-16 year olds. The pain intensity did not differ among the age groups.

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