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Haematology; oral medicine

Oral recurrent human herpes virus infection and bone marrow transplantation survival

Gomez RS, Carneiro MA et al.
Oral Surg 2001; 91: 552-556

Recurrent herpes infection indicated the impending failure of the transplant.

Recurrent human herpes virus 1 (HHV-1) infection is a major oral complication of bone marrow transplantation. This study followed the condition of 52 consecutive patients who received bone marrow allografts over a 3 year period in a Brazilian hospital. Of these, 14 developed recurrent HHV-1 infection and were treated aggressively with acyclovir. One of these had received prophylactic acyclovir and developed infection after 409 days; one other developed infection at 81 days, the remainder, at 5-20 days.

Ten HHV-1 infected patients died within a median 73.5 days, of severe generalized infection or immune dysfunction. At the close of the study, the 4 others had survived 338-1155 days. Nine of the 38 patients without HHV-1 infection also died. When patients who had survived were compared with those who had died, multivariate analysis showed that oral recurrent HHV-1 infection gave a relative risk of death of 4.41, and a platelet count below 100,000 cells/cu.mm after day 100, a relative risk of 6.06. The authors suggest that these effects reflect immune system dysfunction.

Oral pathology

Ameloblastoma: a clinical, radiographic and histopathologic analysis of 71 cases

Kim S-G, Jang H-S et al.
Oral Surg 2001; 91: 649-653

Most cases were unilocular and in younger patients.

Over a 10 year period, 71 patients were treated for ameloblastoma at a Korean hospital, with a follow-up of 13-110 months (mean 65). Nearly 1/3 occurred before the age of 20, a further 1/3 before age 30, and slightly more than half were in males. The principal presenting complaint was swelling (38%), followed by local discomfort (11%), pain and swelling (11%), swelling and discomfort (10%) or pain (9%). The mandibular body accounted for 61% of cases, with a further 10% in the body and ramus, 7% in the angle, 6% in the angle and ramus, and 1% in the ramus.

Radiographic appearance was unilocular in 60% and multilocular in 20%, with 3% of soap-bubble appearance (small locules) and the remainder unclassifiable because of loss of radiographs. Slightly more than 1/3 exhibited a plexiform histological pattern, and nearly 1/3, a follicular pattern. Treatment was either conservative with enucleation and/or curettage, or radical with partial or complete jaw resection.

Only 2 of 40 patients followed up for 5 yrs or more had recurrence, but there were 13 recurrences in those followed for <5 yrs. All patients initially had conservative therapy. The mean age of recurrence was 26 yrs. The authors comment that ameloblastoma

in the maxilla should be treated as radically as possible, and that particular care should be taken to establish the diagnosis of ameloblastoma in young people.

Special care dentistry; orthodontics

Orthodontic treatment for disabled children — a survey of patient and appliance management

Becker A, Shapira J et al.
J Orthod 2001; 28: 39-44

Although there are many difficulties, most disabled patients may be successfully treated.

Over a 9 year period, 40 children with mental and/or physical disability, of mean age 13 yrs (range 7-21) were treated in an Israeli orthodontic clinic. Subsequently, the parents of 35 patients completed a questionnaire on their experience in relation to the treatment. In 5 cases, occlusion was Class I, in 24 cases, Class II and in 6 cases, Class III. Medical diagnoses included mental retardation (15 cases), muscular dystrophy (6), cerebral palsy (5), Down syndrome (4) and autism (2).

In 32 patients, removable appliances were used; 23 accepted these quickly, 7 tried to remove them and 2 did not tolerate them. In 20 patients where fixed appliances were used, 16 adapted quickly but 4 tried to remove them or complained continuously. In only 2 cases was treatment discontinued, which the authors contrast favourably with the reported failure rates in healthy patients.

The main problems encountered by parents were difficulties in hygiene maintenance and in attendance for treatment (13 patients each). In 17 patients treated with both fixed and removable appliances, 8 found the fixed appliance a more difficult stage of treatment, and 4, the removable appliance. The authors give detailed recommendations for treatment based on this and their other research studies.

Sleeping disorders

Oral appliances for the management of severe snoring: a randomized controlled trial

Johnston CD, Gleadhill IC et al.
Eur J Orthod 2001; 23: 127-134

A mandibular advancement appliance (MAA) reduced snoring in most subjects.

About 25% of the adult population snores habitually. In a minority of cases, snoring may also be linked to other disorders including obstructive sleep apnoea (OSA). Snoring and OSA may result from a tendency for the airway to collapse during sleep, and treatment is therefore aimed at preventing this. A recent development is the construction of mandibular advancement appliances (MAA) by dentists, aimed at providing more space in the nasopharynx.

In this study, 25 out of 28 recruited subjects (mean age 48 yrs; all with non-apnoeic snoring) completed a randomized crossover trial of an MAA with a placebo appliance of biteplane design. Appliances were worn for 4-6 weeks each. Subjects' bed partners assessed their snoring, and subjects also completed questionnaires. There were no differences in respect of appliance order. When using the MAA, frequency and loudness of snoring were approximately halved, and frequency of awaking unrefreshed and Epworth Sleepiness Score (based on a standard questionnaire) were also reduced.