Reducing pocket depth

Linda Williams presents a clinical case of the treatment of periodontitis, ensuring informed patient consent

A male patient (Mr A) in his late 60s attended the clinic in June 2014 and was diagnosed with general periodontitis.

At the first assessment, Mr A reported that he felt there was something wrong with his teeth and he wanted a second opinion.

After being asked general health questions, he believed that he had not previously been treated for gum disease. However, patient records from Mr A's previous dental provider stated that he had been treated for periodontal disease at a dental hospital specialist clinic, where he had attended just once before deciding not to continue with the suggested treatment.

When asked about his oral health routine, Mr A revealed that he did not use an electric toothbrush, interdental brushes or floss, and didn't seem to be very aware of his dental status. Therefore, Mr A was provided with information, leaflets and instructions as well as appropriately-sized interdental brushes to enhance his understanding and home-care routine.

Mr A also purchased an electric toothbrush, which he brought into the clinic and was shown how to use correctly.

He was advised to return for a review every three months.

Mr A's next appointment included a detailed case assessment with full status X-rays. This was followed by another appointment to discuss his diagnosis, the aetiology of the periodontal disease and its possible treatment as well as alternative therapies available, along with the probable timescale.

Mr A was given written information about every aspect of the treatment with relevant photographs.

Each time we met, Mr A made notes and presented questions at subsequent appointments, which suggested to me that he did not fully understand the reason for his treatment.

After spending approximately six hours in surgery time explaining procedures and the reasons for their necessity to Mr A, a level of understanding was reached with regards to the purpose of the treatment and expected results.

It is important to monitor a patient's level of understanding and awareness by asking them questions and discussing periodontitis. This way we can re-instruct or reinforce information where necessary and also develop a positive patient/dental provider relationship.

Once I was completely satisfied that Mr A understood the proposed treatment plan and that he was happy to proceed, all procedures were carried out.

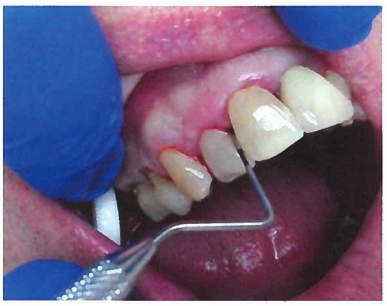

Figure 1: Probing of interproximal space between UL1 and UL2

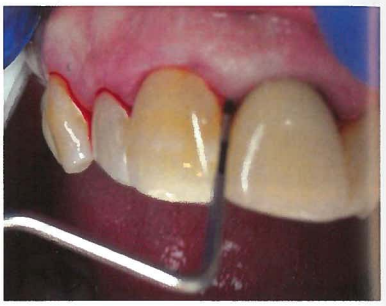

Figure 2: Probing of interproximal space between central incisors

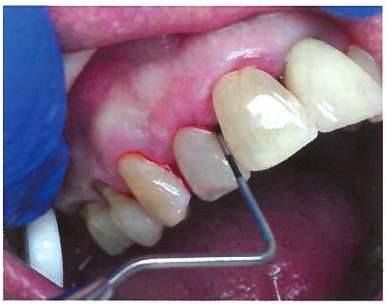

Figure 3: Probing of inter proximal space between UL1 and UL2

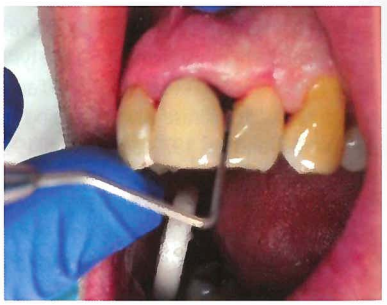

Figure 4: Probing of inter proximal space between UR1 and UR2

> It is important to monitor a patient's level of understanding and awareness by asking them questions

Treatment

On clinical examination, deep pocket depths were identified on teeth UL6, UL7, LL6 and LL7.

Furcation involvement of endodontic origin was determined, partially due to

Linda Williams

Linda is a dental surgeon from Ryedale Dental Healthcare Clinic in North Yorkshire. She has a special interest in advanced surgical procedures and oral tissue regeneration.

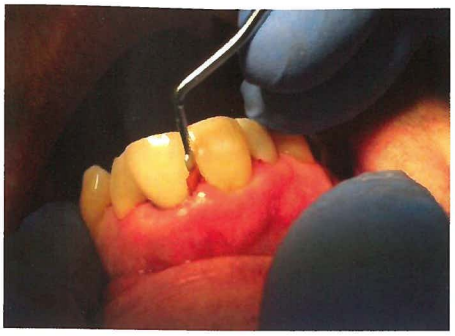

Figure 5: Anterior view of placement of upper Periochip

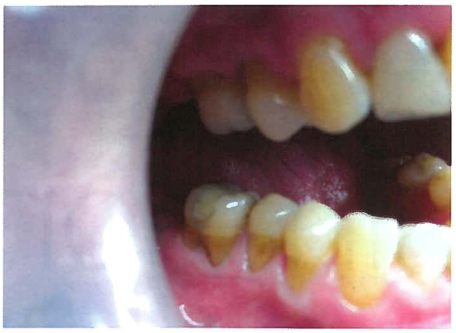

Figure 6: Right lateral posterior view after insertion of Periochip

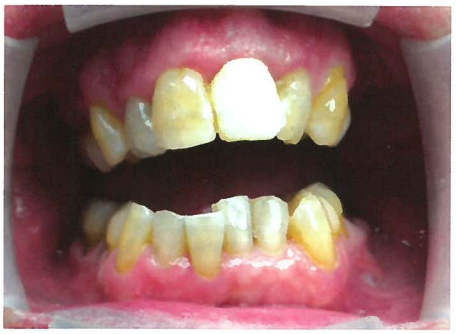

Figure 7: Anterior view of healthier mucosa after insertion of Periochip

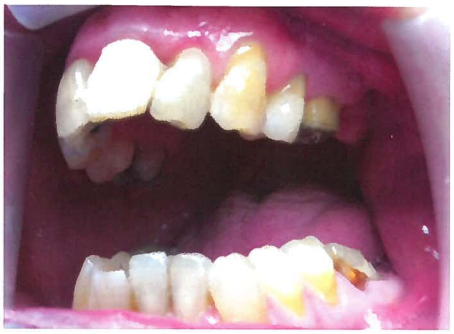

Figure 8: Left lateral view open bite of healthier mucosa after insertion of Periochip

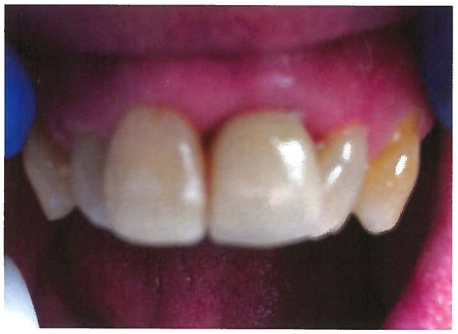

Figure 9: View of LR6 – composite filling

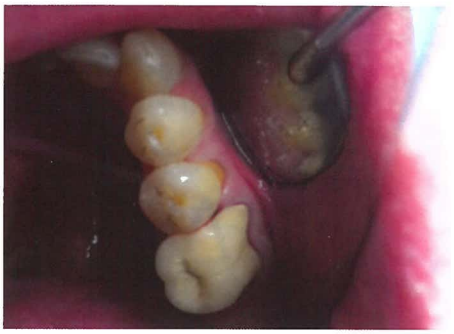

Figure 10: Finished crowns on UL1, UL6 and UL6

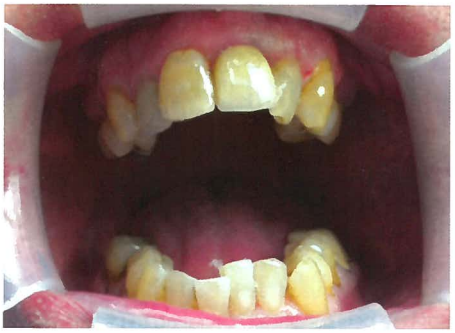

Figure 11: Anterior open bite view of final result

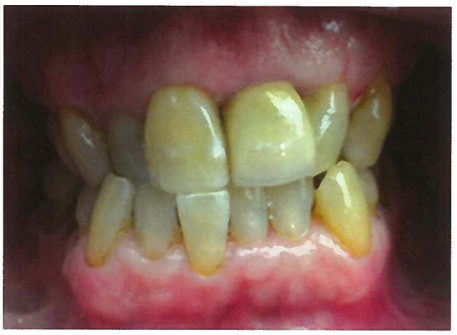

Figure 12: Anterior closed bite of final result

To address the periodontal disease present, deep scaling and root planing were performed, one quadrant at a time

previously insufficient treatment of these teeth (Figures 1-4).

Specialist endodontic treatment and crown therapy was recommended on teeth UL6, UL7 and LL6. As there was very little tooth substance to tooth LL7, it was extracted during the early stages of treatment.

To address the periodontal disease present, deep scaling and root planing were performed, one quadrant at a time, using a local anaesthetic in September 2014. Mr A noticed an improvement after deep scaling.

Periodontal pockets were measured using a calibrated periodontal probe and a maximum number of Periochip inserts were used as an adjunctive treatment in pockets that measured greater than 5mm (Figure 5).

These inserts enabled me to address the disease quickly without the need for invasive methods or antibiotics and to successfully suppress bacterial growth between appointments.

Mr A returned to the surgery at the beginning of February 2015. A decrease in pocket depth was recorded and a further three Periochip inserts were placed into the previously treated pockets still greater than 5mm: teeth UR5, LL5 and LL6 (Figures 6-8).

Carious on tooth LR6 was removed and a glass polyalkenoate cement (GPA) filling provided. Teeth UL1, UL6 and LL6 were root filled at a specialist clinic and will be provided with a Procera crown to tooth UL1 and porcelain bonded crowns to teeth UL6 and LL6 (Figures 9 and 10).

At the next appointment it appeared that Mr A was having difficulties following the oral hygiene instructions previously demonstrated and explained. He was surprised to see the plaque when it was shown to him on the screen using the intraoral camera. His plaque index was 80% and although I felt that Mr A was trying to do his best, oral hygiene instructions were reinforced and gingivitis information was given again.

Mr A was also asked to bring his electric toothbrush with him to his next appointment to practise the brushing technique required.

Interdental brushes were demonstrated and supplied in different sizes and Corsodyl daily toothpaste and rinse were recommended.

After attending every three months for periodontal examination and treatment, the last appointment was at end of May 2015. It was confirmed that there were no periodontal pockets greater than 3mm in all six quadrants (Figures 11 and 12).

Mr A had improved his toothbrushing technique and consequently his plaque index was significantly better. ■