G.N. 3007

DENTISTS REGISTRATION ORDINANCE (Chapter 156)

ORDER MADE BY THE DENTAL COUNCIL OF HONG KONG

It is hereby notified that the Dental Council of Hong Kong ('the Council'), after due inquiry held on 21 February 2019 in accordance with section 18 of the Dentists Registration Ordinance, Chapter 156 of the Laws of Hong Kong, found Dr TAM Kai-tai, Carl ('Dr TAM') (Registration No. D02744) guilty of the following charges:—

'In about December 2015 to September 2016, you, being a registered dentist, disregarded your professional responsibility to adequately treat and care for your patient Ms CHENG Miu-kwai ('the Patient'), or otherwise neglected your professional duties to her in that, you:—

(i) failed to perform adequate pre-operative assessments and investigations before the implant treatment;

(ii) failed to devise a proper and effective treatment plan for the Patient's upper jaw; and/or

(iii) failed to carry out proper and effective implant treatment for the Patient's upper jaw;

and that in relation to the facts alleged you have been guilty of unprofessional conduct.'

On 15 December 2015, the Patient attended the clinic of Dr TAM for the construction of an implant supported bridge for her upper anterior edentulous ridge from 12 to 21. Oral examination was performed by Dr TAM and OPG was taken and showed the following findings:—

(a) Q1 for the upper teeth region: Multiple missing teeth were found at 11, 12, 15, 16, 21, 25, 26. Three implants were placed at positions 13, 14 and 15. A cantilever bridge was constructed from 13 to 16. A removable denture was found at her upper teeth from 12 to 21. 22 was crowned. 27 and 28 had drifted forward to occupy the position of 26. Bone resorption was observed from the upper right premolar (i.e. 14) to molar region.

(b) For the lower region: A bilateral metallic based removable denture was constructed previously.

The initial treatment plan as suggested by Dr TAM was to place implants at 21 and 12 for the construction of a 3-unit implant supported conventional bridge. Dr TAM then performed an anterior edentulous ridge measurement for the labial-palatal thickness with a caliper, which showed thickness of 6.5mm, 7mm and 8.5mm for positions 21, 11 and 12 respectively. In view of the said measurement, Dr TAM considered that 21 might not be suitable for an implant fixture of 3.5mm in diameter. Dr TAM informed The Patient of his findings and proposed an alternative plan of placing the implant fixtures at 11 and 12 instead. Implant surgery was performed under local anaethesia using the flapless technique. Implant fixtures of 3.5mm in diameter and 10mm in length were then placed at positions 11 and 12. According to Dr TAM, the position of each implant was measured with a caliper and a ruler in relation to the adjacent teeth. According to Dr TAM, the result was found to be satisfactory and primary stability was obtained for both fixtures with the shoulders of the fixtures at about 2mm below gum surface (or at bone level). The covering screw were placed subgingivally (with surface slightly below gum level), which avoid interruption of the placement of the existing upper denture.

The Patient was asked to return for follow-up in one week's time so that the condition of her wound could be monitored. On 22 December 2015, the Patient returned to Dr TAM's clinic. She was asked to return again in about a month from the implant surgery. On 19 January 2016, the Patient returned for follow-up for checking the stability of the implant fixtures. Dr TAM used a torque wrench to test the condition of the two implant fixtures by applying force to them. The Patient felt pain on 11 implant area and Dr TAM told her that the said implant fixture had not yet fully integrated. Dr TAM claimed 12 to be satisfactory. Dr TAM asked the Patient to come back in one month's time. On 16 February 2016, the Patient attended Dr TAM's clinic for follow-up. The Patient complained of pain at 11. Dr TAM asked The Patient to come back in one month's time. On 16 March 2016, the Patient attended Dr TAM's clinic. 11 was checked and still could not pass the torque-wrench test. One month review was again arranged. On 11 April 2016, the Patient attended Dr TAM's clinic. Again, 11 could not pass the torque-wrench test. Between

9 May 2016 to 7 November 2016, the Patient made numerous visits to Dr TAM's clinic. On all these consultations, 11 could not pass the torque-wrench test.

In around May 2016, the Patient became impatient and Dr TAM advised her that if she did not want to wait, she could consider removing the implant fixture at position 11 and reinserting the implant at that position after the socket had healed, which would take a few months. Dr TAM told the Patient to seek a second opinion if she wanted. On 14 November 2016, the Patient returned to Dr TAM's clinic to request for copies of her clinical records. On 9 January 2017, the Patient returned to Dr TAM's clinic to check the stability of the implant fixture at 11. 11 did not pass the torque-wrench test but the test revealed less pain. Dr TAM advised her that she could continue to wait for the implant fixture at 11 to fully integrate, which might take another few months. Dr TAM also advised her of removing the implant fixture and reinserting. The Patient did not agree to remove and reinsert the implant fixture at position 11. The Patient did not return to Dr TAM after this visit.

Dr TAM did not contest all three charges.

The Council made the following findings:—

Charge (i)

Charge (i) was that Dr TAM had failed to perform adequate pre-operative assessments and investigations before the implant procedure. The implant treatment performed by Dr TAM on The Patient referred to 12 to 21. The Council stressed that implant treatment was a form of precision dental procedure. By precision, the Council referred to a clear understanding of the physical condition of the potential implant site and its relationship to the final prosthesis. It was elemental to perform adequate pre-operative assessments and investigations so that the clinician can gather clinical information to make a decision to restore the function and aesthetics after tooth loss. Clinicians had to consider, so far as implant was concerned, both surgical and prosthetic aspects of the fixtures and the definitive prosthesis. Therefore, adequate assessments usually included, but not limited to, registering the chief complaint, history of the present complaint, past medical and dental history, social and family history, intra-oral assessment including detailed dental hard and soft tissue status, occlusion, and extra-oral examination.

Regarding adequate investigations, they usually included, but not limited to, study models, plain and/or 3-dimensional radiographic imaging and photographs to inform the quality and quantity of bone, aesthetics and optimum placement of the prosthesis when implant was concerned. The Council was of the view that assessments and investigations should commensurate with the complexity of the presenting condition, dental and patient factors included. Despite Dr TAM had described in his statement that the Patient had an unmarkable medical history, this was in variance with the Patient's witness statement that she suffered from low platelet count. Indeed, there was no evidence in Dr TAM's record that there was any entry for the medical and dental history of the Patient.

According to Dr TAM's statement, the Patient had a recent extraction of teeth but the extraction history of 12 and 21 was not taken; therefore the status of the ridge was unknown. Before the implant procedure, Dr TAM did take an OPG and took a clinical examination of the Patient. According to Dr TAM's statement, he performed an anterior edentulous ridge measurement for the labial-palatal thickness with a caliper, which showed thickness of 6.5mm, 7mm and 8.5 mm for position 21, 11 and 12 respectively.

OPG was a plain tomographic radiograph. It did not reflect the true architecture of the implant site in three dimensions. In particular, interpretation of OPG in the anterior region might be compromised by the limitation of the tomographic cut and the overlapping of the spine. Sole reliance of OPG for assessment was grossly inadequate for the anterior region. Dr TAM attempted to measure the labial-palatal thickness of the anterior edentulous ridge with a caliper. Details of performing those measurements were not provided. Only three readings at unknown bone level were given. These specific measurements however could not be found in the Patient's record. It did not provide any information of the three-dimensional status of the implant site. The Council considered that this measurement by caliper in his manner was grossly inadequate. The Council was satisfied that the conduct of Dr TAM had seriously fallen below the standard expected amongst registered dentists. It would be regarded as disgraceful and dishonourable by registered dentists of good repute and competency.

The Council therefore found Dr TAM guilty of charge (i).

Charge (ii)

Charge (ii) was in relation to Dr TAM's failure to devise a proper and effective treatment plan for the Patient's upper jaw. A proper and effective treatment plan should be based on the clinical information obtained from adequate pre-operative assessments and investigations in order to optimize the treatment outcome. In this case, the Council noticed that there was no entry for the treatment plan in the Patient's record. In Dr TAM's statement, he described the treatment plan for the Patient was a three-unit bridge supported by two implants with the placement of the implant fixtures to be performed using the flapless approach on the same day of the consultation. The edentulous space would be provisionalized by the patient's existing removable partial denture. Dr TAM expected the entire treatment to be completed within 2 to 3 months.

The Council had already ruled that Dr TAM failed to perform adequate pre-operative assessments and investigations. There was no mention of the exact location of the fixtures and their connection to the prosthesis, the choice and the design of implant and prosthesis, their relationship with the soft tissues and the occlusion. The flapless approach suffered from a number of limitations, one of which was limited visibility of drilling and of implant placement with the risk of causing wrong implant directions. Based on the lack of details as described and the inability to visualize the surgical site using a flapless approach, the Council considered Dr TAM failed to devise a proper and effective treatment plan. Such a failure was elemental and grievous. The Council was satisfied that the conduct of Dr TAM had seriously fallen below the standard expected amongst registered dentists. It would be regarded as disgraceful and dishonourable by registered dentists of good repute and competency.

The Council therefore found Dr TAM guilty of charge (ii).

Charge (iii)

Charge (iii) was in relation to Dr TAM's failure to carry out proper and effective implant treatment for the Patient's upper jaw. A failure to perform adequate pre-operative assessments and investigations before implant treatment would necessarily lead to a failure to devise a proper and effective treatment plan, and in turn would necessarily lead to the failure to carry out proper and effective implant treatment.

Dr TAM used the flapless approach on 15 December 2015 for the placement of implant on 11 and 12. The outcome of Dr TAM's treatment to the Patient deviated from Dr TAM's original treatment plan in that the treatment was not completed within 2 to 3 months as Dr TAM promised, and there were two implants, one of which was not ready for implant supported bridge as designed. Flapless surgeries should be restricted to well selected cases in which proper assessments and investigations had been performed. It was a blind technique that hindered a clear view of the bony ridge including the quantity and quality of the bone. Dr TAM did not take any post-operative radiograph. Indeed, one could not ascertain the final position of the implant and its relationship with the bone including, but not limited to, the possibility of fenestration, perforation, improper depth and directions.

A proper and effective implant treatment must include post-operative care and checking the status of osseointegration. In this case, Dr TAM performed torque wrench tests and solely relied on them over a period of time to determine the readiness to proceed to the prosthetic stage. Under no circumstances did Dr TAM indicate that he would perform other tests such as radiographs and periodontal examination. Such a failure was elemental and grievous. The Council was satisfied that the conduct of Dr TAM had seriously fallen below the standard expected amongst registered dentists. It would be regarded as disgraceful and dishonourable by registered dentists of good repute and competency.

The Council therefore found Dr TAM guilty of charge (iii).

Having regard to the gravity of the case and the mitigation submitted by Dr TAM, the Council made the following orders:—

(a) In respect of charge (i), that the name of Dr TAM be removed from the General Register for a period of one month;

(b) In respect of charge (ii), that the name of Dr TAM be removed from the General Register for a period of one month;

(c) In respect of charge (iii), that the name of Dr TAM be removed from the General Register for a period of one month;

(d) The orders in paragraphs (a), (b) and (c) above be concurrent;

(e) The operation of the orders as set out in the paragraphs above be suspended and shall not take effect for a period of 12 months;

(f) During the suspension period of 12 months, Dr TAM shall satisfactorily complete a total of 15 hours of continuing dental education in courses relating to assessments and radiographic investigations of dental implant treatment organized by established dental institutions and to be approved by the Chairman to the Council, and every such approval of intended courses which Dr TAM wishes to take has to be sought from the Chairman one month in advance;

(g) The order of suspension in paragraph (e) above shall be uplifted if Dr TAM is found by the Council to be in breach of the order as set out in paragraph (f) above, or if a finding is made against Dr TAM during the said suspension period under section 18(1)(a) to (e) of the Dentists Registration Ordinance, Chapter 156.

(h) The orders in paragraphs (a) to (g) above shall be published in the *Gazette*.

In accordance with section 18(5) of the Dentists Registration Ordinance, the orders of the Council shall be published in the Government of Hong Kong Special Administrative Region Gazette. The full judgment of the Council is published in the official website of the Dental Council (http://www.dchk.org.hk).

LEE Kin-man *Chairman, Dental Council of Hong Kong*