**G.N. 226**

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 10 November 2022 in accordance with section 18 of the Dentists Registration Ordinance, Chapter 156 of the Laws of Hong Kong, found Dr LIU Kwok-wai, Harry ("Dr LIU") (Registration No. D02168) guilty of the following charge:—

"During the period from about June 2014 to July 2016, he, being a registered dentist, disregarded his professional responsibility to adequately treat and care for his patient, Ms HUI Tsz-ting ("the Patient") or otherwise neglected his professional duties to the Patient in that, he failed to assess and/or monitor the periodontal status of the Patient's teeth during the orthodontic treatment; and that in relation to the facts alleged he has been guilty of unprofessional conduct."

On 9 June 2014, the Patient consulted Dr LIU complaining that her front teeth were protruding and that there were spaces between her upper central incisors. The Patient requested for orthodontic treatment. Dr LIU took impressions of the upper and lower jaw. An orthopantomogram ("OPG") and a lateral cephalogram were also taken. As shown in the Patient's clinical notes, Dr LIU offered three treatment options, as follows:—

*"1. Upright upper and lower molars with extraction of 15 25 35 45 + upper anterior bite plane for 6 months (may need occlusion reduction / RCT / Crown) …*

*2. only align 14 to 24 and 34 to 44 with closing of space between 11 and 21 and overjet reduction (molar scissor bite untouch) with extraction of 15 25 35 45 …*

*3. only align upper anterior with no extraction of teeth."*

On 16 June 2014, the Patient returned to see Dr LIU and agreed to proceed with the second treatment option. Dr LIU took pre-treatment photographs. Orthodontic treatment then started and lasted for around two years. On 11 July 2016, Dr LIU removed the orthodontic appliance. On 18 July 2016, Dr LIU provided the retainers to the Patient. Dr LIU took a post-treatment OPG, lateral cephalogram and photographs. On 30 July 2016, the Patient returned to see Dr LIU and requested further retraction of the upper anterior teeth. Dr LIU told the Patient that it was not possible unless further extractions were performed and closing the spacing in the lower arch would make the upper front teeth protrude more. The Patient had not returned to see Dr LIU since this consultation.

The Patient next consulted a Dr LING on 3 February 2017 for "scaling and polishing". On 16 May 2018, the Patient consulted a Dr SHEK for orthodontic treatment and scaling and polishing. In Dr SHEK's referral letter dated 13 June 2018, she recorded that the Patient presented with the following:—

*"Unsatisfactory oral hygiene*
*16, 26 mesially tilted, bone loss, not mobile*
*36 mesially tilted, M angular bone loss*
*17/47, 27/37 crossbite, bone loss, not mobile*

*Generalised root resorption and gingival recessions*

*Overjet +2.0mm"*

She also recorded that the Patient was advised to see periodontist and orthodontist for follow-up. Photographs of two radiographs were shown in the referral letter.

On 25 March 2019, the Patient consulted a Dr NG, a specialist in orthodontics. In Dr NG's letter dated 29 June 2019, she noted "*Oral hygiene is fair with significant gingival recession, loss of interdental papilla at lower anterior teeth*". Her diagnosis was "*Class 1 skeletal pattern with bimaxillary dentoalveolar protrusion with Class II molar and canine relationship on both sides and scissor bite at 17 and 27.*" On 30 April 2019, the Patient consulted a Dr KAM for scaling and polishing.

On 3 June 2019, the Patient consulted a Dr FUNG, a specialist in periodontology. From Dr FUNG's referral letter dated 10 July 2019, he noted that the Patient:—

*"… presented with localized chronic periodontitis with:*

- *Fair OH in general, inadequate plaque control at lingual surface of molars and mesial surface of tilted 16, 26*
- *Moderate amount of supra- and subgingival calculus, esp. molars area*
- *Generalised bleeding upon probing*
- *Increased probing pocket depth up to 7mm at:*
    - *16MB, 26MP, 36 mid-L, 37DB, 46ML"*

Dr FUNG advised the Patient to seek a second opinion and further dental care from the Prince Philip Dental Hospital.

By an email dated 20 April 2018, the Patient lodged a complaint against Dr LIU.

The Council made the following findings in respect of the charge:—

Dr LIU admitted the factual particulars of the disciplinary charge against him but it remained for the Council to consider and determine on the evidence whether he had been guilty of unprofessional conduct.

In respect of the charge, the Council only focused at the period from about June 2014 to July 2016. Events after this period only formed part of the background.

The Council agreed with the Secretary's expert that diminished oral hygiene together with periodontal disease would make orthodontics a high-risk treatment for the periodontium.

Performing orthodontic treatment without assessment and monitoring of periodontal status of patients was a direct risk of periodontal destruction by allowing the progression of existing periodontal disease unchecked. Further, orthodontic tooth movement might exacerbate periodontal destruction in patients with existing periodontal inflammation. The clinical relevance was orthodontic tooth movement should only be performed on healthy periodontium or after periodontal therapy. In case of periodontal relapse, orthodontic therapy should be suspended until the periodontal inflammation had been successfully treated and thus the periodontal disease was controlled again.

It was a good practice for periodontal assessment to include measurement of the gingival recession, periodontal pocket depth, bleeding on probing, degree of furcation involvement, clinical mobility, etc. In the present case, before the commencement of the orthodontic treatment, Dr LIU had performed clinical assessment and taken radiographs, study model and photographs. The pre-operative radiographs and photographs taken by Dr LIU were basic and essential. They assisted him to assess the bone level and soft tissue status of the Patient before commencement of the orthodontic treatment. Amongst other assessment procedures, they were important indicators of the periodontal status. It formed the record and the baseline to compare future changes. The Council was of the view that Dr LIU had taken steps to assess the periodontal status of the Patient.

As said, the purpose of taking pre-operative x-ray was to provide baseline information to compare future bone level changes. Dr LIU had taken a post-operative x-ray, which when compared with the pre-operative x-ray, clearly showed that there were changes in the bone level. There was a total of around 20 consultations during the entire orthodontic treatment. Dr LIU wrote in his submission to the Preliminary Investigation Committee that during the course of the orthodontic treatment, he observed that the Patient had periodontal issues i.e. inflammation of the gums. Dr LIU said that upon each occasion that he saw the Patient, he had advised her of the importance of oral hygiene, and reminded her to brush her teeth more thoroughly. If Dr LIU had observed that there were periodontal issues, there was more the reason for him to continuously monitor the periodontal status of the Patient. This should have alerted him to timely perform necessary assessment procedures as to diagnose the periodontal status and manage the periodontal problems accordingly. However, there was no record that Dr LIU had monitored the Patient's periodontal status at all. The Council was satisfied that Dr LIU had failed to monitor the Patient's periodontal status during the course of the treatment. Such failure was an elemental failure, and in the Council's view amounted to unprofessional conduct.

The Council was satisfied that the conduct of Dr LIU had seriously fallen below the standard expected amongst registered dentists. It would be reasonably regarded as disgraceful and dishonourable by registered dentists of good repute and competency.

The Council therefore found Dr LIU guilty as charged.

Having regard to the gravity of the case and the mitigation submitted by Dr LIU, the Council ordered that Dr LIU be reprimanded. The Council's order shall be published in the *Gazette*.

In accordance with section 18(5) of the Dentists Registration Ordinance, the order 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*