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## Correspondence

## Analysis of death related to dental treatment from Taiwan judicial judgment database



Medical malpractices involve any incorrect diagnosis or improper treatment of disease which do not conform to the standard guidelines of care resulted in patient trauma or deleterious injury. For example, improper treatment plan, broken instrument, swallowing endodontic file, and improper local anesthesia in daily dental practice were frequently found in court judgments.<sup>1–3</sup> Lack of informed consent and injury to anatomy were the top two major causes of dental criminal lawsuits in Taiwan.<sup>1</sup> However, dental treatment associated with death was not investigated and comprehensively assessed. In this article, the authors searched and analyzed Taiwan's dental criminal lawsuits of dental treatment resulted in death.

In this case analysis, the Taiwan Judicial Judgment Database (https://judgment.judicial.gov.tw/FJUD/default. aspx) was used to filter death related to dental treatment from 2000 to 2022. Only 5 cases of death related to dental treatment were extracted. The characteristics of these cases was shown in Table 1. The reasons from claim verdicts were cancer (N = 2), implant (N = 1), third molar

extraction (N = 1), and anesthesia for caries management (N = 1). The defendant's institutions were medical centers (N = 2) and dental clinics (N = 3). The district courts were Taipei (N = 2), New Taipei (N = 1), Miaoli (N = 1), and Taichung (N = 1). Case III and case IV had both civil and criminal lawsuits. The results demonstrated that the decisions both from criminal court and civil court were no guilty and dismissed, respectively.

To the best of our knowledge, this is the first analysis of death related to dental treatment in Taiwan. Although, there were no causal relationship between death and related dental treatment from court decisions. However, the lessons from this analysis may raise some advices to minimize the potential risk of death or reduce the liability. It is necessary to implement informed consent before dental treatment. Dental clinic should be equipped with first aid equipment. The well-established referral system is required. In addition, commercial insurance transferred for the responsibility of unpredictable risk is strongly recommended.

Table 1	Characteristics of death related to dental treatment from Taiwan Judicial Judgment Database.					
	Dental treatment	Death reason	Medical institution	Criminal court decision	Civil court decision	District court
Case I	Local anesthesia for caries treatment	Sudden shock	Local clinic	N/A	Dismissed	Taichung
Case II	Bleeding after lower 3rd molar extraction	Acute leukemia	Local clinic	No guilty	N/A	Miaoli
Case III	Implant surgery	Cerebrovascular stroke	Local clinic	No guilty	Dismissed	New Taipei
Case IV	Tongue cancer	Respiratory failure	Medical center	No guilty	Dismissed	Taipei
Case V	Oral cancer	Lung metastasis	Medical center	No guilty	N/A	Taipei
N/A: Not applicable.						

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In conclusion, death is a rare adverse event of dental treatment in Taiwan. Our analysis would be helpful to prevent such regret events and lawsuits. How to enhance clinical skills and patient safety still need to keep tracking and stay tuned. Nowadays, dentist might engage with legal claims and be sued if patients are not satisfied with the treatment outcome. With a structured communication between patient and dentists<sup>4</sup> as well as the implementation of shared decision making in clinical dentistry,<sup>5</sup> these would minimize the medical disputes as well as lawsuits.

## Declaration of competing interest

The authors have no conflicts of interest relevant to this article.

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