T A D S: A Nomenclature Coding System for Mini-Implants

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Abstract
Advances in the field of mini-implants lead to their availability in various head forms, materials, and in different sizes, which widened their scope in orthodontics. With the increased usage of mini-implants, a common nomenclature coding system providing the details of mini-implants for better communication and data storage is essential. Hence, in this article, an easy and clear-cut nomenclature coding system “T A D S” has been described.

Keywords
Mini-implants, nomenclature, coding, TADS

Introduction
The introduction of mini-implants aids in achieving absolute anchorage because of the implants’ wide range of sizes, compliance, ease of insertion and removal, and an excellent biomechanical advantage in different clinical scenarios.¹ A proper standardized coding system is required for their communication and data storage regarding their site, size, position, and sort of mini-implant head. Hence, a coding system, T A D S, has been contributed, which assists in communicating unambiguous data and in better comprehension about mini-implants.

Procedure for Coding
There are four basic components, namely T, A, D, and S, which are denoted in uppercase letters. These are used for describing the site, position, dimension, and sort of mini-implant (Table 1). The details of the individual components, if applied, are denoted in lowercase letters or numbers as a superscript next to their respective components of codes.

| Basic Components | Description                   |
|------------------|-------------------------------|
| T                | Target area for mini-implant insertion |
| A                | Area of mini-implant insertion from Cemento Enamel Junction (CEJ) |
| D                | Dimensions of mini-implant |
| S                | Shape of mini-implant head |

Table 2. Description of the Subcomponents of T

| Subcomponents of T | Description               |
|--------------------|---------------------------|
| B                  | Buccal side               |
| P                  | Palatal side              |
| L                  | Labial side               |
| T                  | Tuberosity area           |
| R                  | Retromolar area           |
| E                  | Edentulous area           |
| +                  | In between upper central incisors |
| –                  | In between lower central incisors |

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Table 3: Description of the Subcomponents of S

| Subcomponents of S | Description |
|--------------------|-------------|
| S                  | Small       |
| B                  | Bracket     |
| L                  | Long        |
| C                  | Circle      |
| F                  | Fixation    |

Source: Own work of Dr. Anand Viswanadh K

2. Description of component “A”
This component tells us about the area of mini-implant insertion from the cemento enamel junction (CEJ). The distance is measured in millimeter (mm) and denoted in numbers as a superscript.

3. Description of component “D”
This component tells us about the dimensions of the screw, i.e., the length and diameter of the screw. Both these dimensions are denoted in numbers as a superscript to component “D” and measured in mm.

4. Description of component “S”
This component tells us about the shape of the head, and its subcomponent denoted in lowercase letters as a superscript (Table 3).

Example: T^{b15} A^6 D^{7×1.5} S^f

Description of the Code

A mini-implant is placed buccally between 15 and 16 at a distance of 6 mm from CEJ, with screw dimensions of 7 mm length and 1.5 mm diameter, with a fixation head.

Discussion

Over the last decade, there are several advances in the design and material aspects of mini-implants. The usage of mini-implants and their descriptions are commonly explained in a much-elaborated form. Communication and data transfer with other orthodontists and researchers is becoming difficult due to the lack of a standard nomenclature system. Clinical photographs and radiographs will only provide the location of mini-implants and are unable to provide any information regarding the dimensions of the mini-implants used and their distance from the CEJ. So, a simple and instantly recognizable nomenclature coding system is required. This problem is effortlessly resolved with nomenclature coding system TADS for mini-implant usage. With this nomenclature coding system, data regarding mini-implants are elaborated concisely as superscripts over these four main components.

Conclusion

The present nomenclature coding system for mini-implants is in a comfortable and clear-cut way to understand, for better communication, appropriate data storage, and in retrospective studies.

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