

Dentistry to the rescue of missing children: A review

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Abstract

Today's society is becoming increasingly unsafe for children: we frequently hear about new incidents of missing children, which lead to emotional trauma for the loved ones and expose systemic failures of law and order. Parents can take extra precautions to ensure the safety of their children by educating them about ways to protect themselves and keep important records of the child such as updated color photographs, fingerprints, deoxyribonucleic acid (DNA) samples, etc., handy. However, in spite of all efforts, the problem of missing children still remains. Developments in the field of dentistry have empowered dentists with various tools and techniques to play a pivotal role in tracing a missing child. One such tool is Toothprints, a patented arch-shaped thermoplastic dental impression wafer developed by Dr. David Tesini, a paediatric dentist from Massachusetts. Toothprints enables a unique identification of the missing children not only through the bite impression but also through salivary DNA. Besides the use of Toothprints, a dentist can assist investigating agencies in identifying the missing children in multiple ways, including postmortem dental profiling, labeled dental fixtures, DNA extraction from teeth, and serial number engraving on the children's teeth. More importantly, all these tools cause minimal inconvenience to the individual, making a dentist's role in tracking a missing child even more significant. Thus, the simple discipline of maintaining timely dental records with the help of their dentists can save potential hassles for the parents in the future.

Key words: Bite impressions, child identification program, dentist's role, missing child, Toothprints

Introduction


Today's society is deteriorating into an unsafe place for its citizens, particularly for the children. Missing children is a complicated phenomenon and there are multiple dimensions to it to deal with. On the one hand, it results in emotional and psychological trauma for both the missing

child and the family, while on the other hand, it points to the systemic failures of our system as well as a degradation of our social values.

A child can go missing in two possible ways:^[1]

- The child is abducted by someone against the law and against the child's consent
- The child willingly leaves the care and control of his or her guardians without letting the guardians know about his or her intent.

In a peculiar case reported, two young children, 11 and 13 years old respectively, from Southern Italy, went missing. A fireman found two corpses in a subterranean, dry cistern next to a well over 20 m deep. The bodies were well preserved, almost mummified, with only a few body

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parts skeletonized. Based on the forensic analysis, including dental records, they were identified as those two children who had gone missing one and a half years earlier. The autopsy showed no signs of defensive injuries or ligature consistent with strangulation or captivity. However, the injuries were consistent with a fall from a low-medium height.^[2]

Missing children have become a recurring phenomenon in today's world. While the phenomenon is a stark reality, parents can take some steps to prevent such a tragedy and ensure that their children are safer:^[3, 4]

Color photographs of children need to be taken every 6 months, so that in case of a criminal incident, the parents have access to a very recent photograph. In addition to the photographs, the parents also need to have a detailed written description of their children:

- Hair color
- Eye color
- Weight
- Height
- Date of birth
- Unique physical attributes (birth mark, use of glasses or braces, etc.)
- Deoxyribonucleic acid (DNA) samples of the children must be kept as a precaution. DNA has become the "gold standard" for all identification matters. However, only the parents and guardians of a child should have access to the child's DNA sample
- Fingerprints are another means for identifying a child. It should be remembered that fingerprints need to be taken by a trained professional
- Easy access to the medical records of the child can help in child identification. Medical records such as x-rays, permanent scars, and blemishes can be very helpful in identifying a recovered child. The parents need the full support of their doctors to ensure easy access. Some of these nondental sources have practical limitations. Few children have fingerprint records. DNA sampling, while being state-of-the-art, can be protracted and costly. Dentistry can provide data without many of these limitations
- Dental x-rays, charting, and bite impressions can be important means of child identification. Dentists can play a significant role in tracing a missing child, for example by taking bite impressions. One such tool that is available for the same is Toothprints, which is covered in detail in the next section.

Toothprints: A tool to trace the missing child

The bite impression concept was introduced in Massachusetts at Tufts University in 1985 and was further enhanced under the supervision of Dr. Stanley Schwartz, a former Massachusetts State forensic dentist and past president of the American Board of Forensic Odontology (ABFO).^[5]

However, this concept was taken further by Dr. David Tesini, a paediatric dentist from Massachusetts, who developed Toothprints®, a simple and cost-effective way of documenting a young patient's unique tooth characteristics by showing the size and shape of the teeth, tooth position within the arch, and maxillomandibular (jaws) relation, all of which can serve as important identifiers.^[6] It is an effective tool that can be used by the police to track missing children.

Toothprints is a patented, arch-shaped thermoplastic dental impression wafer that can be placed in a person's lower arch to take the dental impression. However, before it is placed in person's mouth, it needs to be softened in hard water. The child needs to bite the wafer for about 50 s in a manner similar to the manner in which bite registration takes place in prosthetics or orthodontics. After a 2-3 min cool-down period, the bite impression is ready and can be handed over to the child's parents in a plastic bag so that they can take it home and store it safely for any future use, if need be. As the procedure is simple, this can even be done at home, if the child is not comfortable doing it at a dentist's office.^[7]

Toothprints has become a very popular method for child identification, as taking a bite impression not only takes a few minutes but is also comfortable for young persons, as well as resulting in peace of mind for the parents.

Moreover, Toothprints not only provides vital information through the bite impression, but also helps capture DNA information through the person's saliva. Here, it is important to note that even identical twins do not have the same dental characteristics.^[6] However, to keep the impressions useful, they need to be updated at regular intervals.^[7]

- Initial impression: Age 3 years (or after all primary teeth have erupted)
- Update: Age 7 years or 8 years (or after the upper and lower incisors and the first permanent molars have erupted)
- Update: Age 12 years or 13 years (or after all permanent teeth, excluding the third molars, have erupted).

Besides the bite impression, Toothprints can provide important tracking information through the DNA in saliva. Salivary DNA is derived from the constant shedding of epithelial cells from the oral mucosa. Objects remaining in the mouth for any period of time or the rubbing of objects against the tissues of the mouth collect this salivary DNA. Multiple studies claim that a Toothprints (wafer left in the mouth for 50 s) provides a significant amount of genomic or mitochondrial DNA.^[7-9] However, there are other studies that have proved that the DNA information present in a Toothprints is much less than that in a swab. One such study established that the DNA information in a dental impression wafer is much less than that in mouthwash or buccal swabs (measured through Quant-iT PicoGreen (Invitrogen, Carlsbad, Calif.) assay method).

However, the DNA information may be sufficient for amplification and identification using the polymerase chain reaction (PCR) technique^[10-15] or the real-time polymerase chain reaction (RT-PCR) technique.^[16, 17] The results of the study are as given in [Tables 1 and 2].^[18]

The analysis clearly shows that the DNA yield of a dental impression wafer is much lower than that from mouthwash or buccal swabs. However, according to the Federal Bureau of Investigation (FBI), the typical amount of DNA required for analysis is only 0.001 µg (Dr. Bruce Budowle, Senior Scientist, Laboratory Division, FBI, written communication, November 2005). Thus, we can safely assume that 0.0279 µg of DNA yield obtained from a dental impression wafer would be adequate for the analysis.

In fact, Toothprints has become such a powerful concept that it has become an integral concept in the Child Identification Program (CHIP), one of the most comprehensive child recovery and identification programs in the US, sponsored by the Massachusetts Freemasons and supported by the Massachusetts Dental Society.^[19] The program also includes the use of other powerful techniques such as videotaping and fingerprinting. The following two examples establish the power of Toothprints:

- A tracking dog scented a 1-year-old Toothprints and was able to track a child in a ballroom full of 500 seated persons^[20]
- Dogs were able to track children by scenting 8-month-old Toothprints for 200 yards in 20 mph winds “without any problems.”^[21]

Thus, besides providing unique dental impressions and salivary DNA, Toothprints can also be useful in scent-tracking. Establishing Toothprints as an effective, valid tool may enhance the genetic and dental matching processes that are used to identify recovered living and deceased children.^[22] However, Toothprints should never be considered as a substitute to dental records, but as a suitable adjunct to dental records for identifying a child.

Table 1: Quant-iT PicoGreen DNA yield

Method	No. of patient samples	Mean (micrograms)
Mouthwash	20	509.57
Buccal swab	20	113.61
Dental impression wafer	20	1.03

*Micrograms: µg, DNA: Deoxyribonucleic acid

Table 2: RT-PCR DNA yield

Method	No. of patient samples	Mean (micrograms)
Mouthwash	19	22.2540
Buccal swab	19	11.5240
Dental impression wafer	19	0.0279

*Micrograms: µg, DNA: Deoxyribonucleic acid

Thus, besides assisting in taking the dental impression, a dentist's role becomes crucial in tracing the missing child, the details of which are covered in the next section.

Dentist's Role

Although Toothprints is an effective tool for tracking a missing child, the dentist can always apply other techniques to assist in the investigation of a missing child:^[23]

Postmortem dental profiling

In case the antemortem dental records of a deceased child are unavailable, the forensic dentist can assist in limiting the demographic to which the deceased is likely to belong and thus increase the likelihood of locating the antemortem dental records, as the investigating team would be able to do a more focused search of the antemortem records.^[24] This postmortem dental profiling can help provide information on age, sex, and possibly socioeconomic status. Sometimes it can also provide additional information about dietary habits, occupation, habitual behaviors, etc.

Labeled dental fixtures

Labeled dentures or removable braces can also be instrumental to identification purposes.^[25] Whittaker and Macdonald in 1989 described a case where a removable orthodontic appliance was used to identify a victim of a house fire.^[26]

DNA extraction from teeth

Teeth represent an excellent source of DNA material.^[27] Through PCR, DNA from the teeth can be replicated a billion fold and used for multiple identification tests.

Serial number engraving on children's teeth

A code can be engraved on a child's permanent teeth such that it can be revealed only after an x-ray. A database of all children can be maintained that stores basic information about the child such as name, date of birth, physical features, etc., against the code engraved on the child's tooth. The code details can be given to the parent or the guardian. If a child goes missing, the police can help publish the code to all the dentists in the country (through dental magazines, newsletters, etc.) until the child is located. If a dentist detects the code during routine a check-up, he or she can look up the code against the list of codes of missing children and inform the police accordingly.

Thus, through the method of engraving a code on a child's teeth, a dentist can play a crucial role in tracking a missing child, particularly if he or she has been abducted by a known person. There are various engraving techniques available including metallic materials, microchips, microlabels, and non-metallic materials. Microchips seem to be superior to the other methods, since the photochemical etching process by which they are inserted offers an acceptable aesthetic

result due to their small size. They are also cost-effective and fulfil all the forensic requirements.^[28]

Age estimation

Determining age requires an interdisciplinary approach that involves the services of physicians with forensic experience and knowledge of auxology, radiology, dentistry, and legal medicine.^[29] Dental and skeletal maturity are commonly used indicators for age assessment.^[30]

Dental structures can provide useful indicators of the individual's chronological age.^[31] The age of children (including fetuses and neonates) can be determined by the analysis of tooth development and subsequent comparison with developmental charts. Conclusions are usually accurate to approximately ± 1.5 years. Charts such as those developed by Ubelaker graphically illustrate the development of dentition, mixed and permanent.^[24] It is important to note that when determining subadult ages, eruption dates of the teeth are highly variable and the actual developmental stages of the teeth are more accurate.

Some commonly used methods for age determination in children and adolescents are:

- Schour and Massler method^[32]
- Moorrees, Fanning, and Hunt method^[33]
- Demirjian, Goldstein, and Tanner method^[34]
- Portigliatti Barbos-Robetti method^[35]
- Nolla's method^[36]
- Measurements of open apices.^[37]

In adults, clinically the development of permanent dentition is completed with the eruption of the third molar at 17-21 years, after which radiographic age estimation becomes difficult. The two commonly used methods are:

- Volume assessment of teeth:
 - Pulp-to-tooth ratio method of Kvaal^[38]
 - Coronal pulp cavity index^[39]
- Development of third molar:
 - Harris and Nortjè method^[40]
 - Van Heerden system.^[41]

Besides dental development, skeletal maturity is also an essential marker for age estimation. The fully developed human adult skeleton has 206 bones. The genesis, growth, and degradation changes in these bones throughout life can be used to gauge the age of the individual. Much like dental development, many of these changes occur in an observable consistent sequence during a reasonably definite time period in the development of the human body. The changes are age-related and occur during a limited and definite time frame common to most human beings. These are the properties that allow us to use these modulations to assess the age of an individual.

The hand-wrist radiograph is commonly used for skeletal developmental assessment, as skeletal developmental stages of the hand and the wrist have been shown to be meticulously associated with pubertal growth.^[42]

Guidelines were published by the international and interdisciplinary Study Group in Forensic Age Diagnostics (AGFAD) founded in Berlin, Germany in 2000 for the forensic estimation of the chronological age of living individuals. Those guidelines recommended the performance of the following tests to determine age:^[43]

1. Physical examination: Anthropometric measurements (weight, height, build); inspection of signs of sexual maturity; identification of diseases that could alter development
2. X-ray examination of the left hand
3. External examination of the condition of the teeth and dental x-ray
4. X-ray examination of the medial clavicular epiphyseal cartilage to confirm if the chronological age is over or less than 21.

Thus, dentistry can play a pivotal role in the investigation of a missing child. However, a dentist needs to ensure that appropriate dental clinical data is collected for all his or her patients, including:^[44]

- Dental radiographs
- Facial photographs
- Study casts
- Dental histories documenting
 - Teeth present
 - Distinguishing features of oral structures
 - Bite registrations
- Restorative history documenting restored surfaces and materials used.

Many programs have been developed and sponsored by community groups globally that use various child identification methods. For example:

- CHIP: This program gathers saliva samples for DNA fingerprinting, videos, Toothprints, and fingerprints^[45]
- The National Child Identification Program, sponsored by the American Football Coaches Association with the Optimist International and Clear Channel International. They use an identification card that includes fingerprints, a physical description, photographs, and the physician's office address/telephone number^[46]
- New England Kids Identification System (KIDS) sponsored by the Massachusetts Freemasons and the Massachusetts Dental Society, which incorporated dental bite impressions and cheek swabs to gather DNA material for CHIP.^[18,47]

To summarize, a tabular representation of the various methods that help in tracking and identifying the missing

Table 3: Methods to track and identify missing children (with respective merits and demerits)

Method	Merits	Demerits
Dental radiographs	The teeth survive most postmortem events that can disrupt or change other body tissues	In some cases even full-mouth series of radiographs may not reveal sufficient detail to render a positive identification
Facial photographs	Easy to record and maintain; can be done by the parents themselves without any professional help	Null in case of distortion of facial structures
Study casts	Simple and yielding method; Palatal rugae patterns rendered on dental casts can also be used for comparison	Lack of dental records; Invalid in case of deformation of dental structures
Bite registrations (toothprints)	Cost-effective way of documenting a young patient's unique tooth characteristics	Not a substitute to dental records but rather a suitable adjunct to dental records
Restorative history documenting restored surfaces and materials used	Innovative method using the unique properties and composition of dental materials	Lack of dental records and documentation; Loss or dental materials from the oral cavity
Labeled dental fixtures	Creative and cost effective method	Not useful in cases of absence of relevant dental history of fixtures
DNA extraction from teeth	Resistant nature of teeth makes them excellent source of DNA	Can be protracted; Costly
Serial number engraving in child's teeth	Avant garde method that uses generation of a unique code on the teeth	Loss of engraving in case of distortion of dental structures
Post-mortem dental profiling	Instrumental in case of absence of antemortem records	If the postmortem profile does not elicit the tentative identity of the deceased it may be necessary to reconstruct the individual's appearance during life
Age estimation	Teeth are less susceptible to nutritional, hormonal and pathological changes particularly in children. Hence can be used for age estimation	Lack of universal method; inability to determine exact age

DNA: Deoxyribonucleic acid

children with their respective merits and demerits is provided [Table 3].

Conclusion

A detailed dental record updated at recall appointments can provide us with an excellent database of confidential, state-of-the-art child identification information, which can be very useful in tracking a missing child. Moreover, it is very convenient for the dentist to prepare the dental record without causing much trouble to the child. Clearly, the use of the tooth as an identification mechanism establishes a strong case for itself, and investigating agencies can leverage this strong potential with the help of a dentist. Thus, in addition to serving the already noble purpose of maintaining the dental health of a child, a dentist can go a long way in making sure that a missing child is reunited with his or her loved ones as soon as possible.

References

- Standard for Public Safety Telecommunications when Responding to Calls of Missing, Abducted and Sexually Exploited Children. Available from: <http://www.amber-net.org/>. [Last accessed on 2010 Oct 10].
- Introna F, De Donno A, Santoro V, Corrado S, Romano V, Porcelli F, *et al.* The bodies of two missing children in an enclosed underground environment. *Forensic Sci Int* 2011; 207:e40-7.
- Sedlak AJ, Finkelhor D, Hammer H, Schultz DJ. NISMART: National Estimates of Missing Children: An Overview. Washington, DC: U.S. Department of Justice; 2002. p. 5.
- Guidelines for Programs to Reduce Child Victimization: A Resource for Communities when Choosing a Program to Teach Personal Safety to Children. Alexandria, Virginia: National Center for Missing and Exploited Children (NCMEC); 1999.
- Tesini DA, O'Malley KD, Schwartz S. Development of a bite impression technique for use in identification of missing and unknown children. *J Mass Dent Soc* 1985; 34:61, 63, 69 *passim*.
- Tesini DA, Harte DB, Crowley K. Dentistry's role in identification of missing and unknown children: Update on the dental bite impression technique. *J Mass Dent Soc* 1999; 48:29-34, 50.
- Toothprints-toothprint DNA Dental Impressions. My Precious Kid Family Safety Products and Baby Gear Store. Available from: <http://www.mypreciouskid.com/toothprints.html>. [Last accessed on 2002 Dec 03].
- Sognaes RF, Rawson RD, Gratt BM, Nguyen NB. Computer comparison of bitemark patterns in identical twins. *J Am Dent Assoc* 1982; 105:449-51.
- Spencer DE. Bite Marks in Child Abuse: Manual of Forensic Odontology. 3rd ed. Montpelier, VT: Printing Specialists; 1995. p. 78.
- Sweet D, Shutler GG. Analysis of salivary DNA evidence from a bite mark on a body submerged in water. *J Forensic Sci* 1999; 44:1069-72.
- Sweet D, Lorente JA, Valenzuela A, Lorente M, Villanueva E. PCR-based DNA typing of saliva stains recovered from human skin. *J Forensic Sci* 1992; 42:447-51.
- King IB, Satia-Abouta J, Thornquist MD, Bigler J, Patterson RE, Kristal AR, *et al.* Buccal cell DNA yield, quality, and collection costs: Comparison of methods for large-scale studies. *Cancer Epidemiol Biomarkers Prev* 2002; 11:1130-3.
- Sivagami AV, Rao AR, Varshney U. A simple and cost-effective method for preparing DNA from the hard tooth tissue, and its use in polymerase chain reaction amplification of amelogenin gene segment for sex determination in an Indian population. *Forensic Sci Int* 2000; 110:107-15.
- Gall K, Pavčić D, Pavčić J, Audy-Jurković S, Pavčić K. PCR amplification of DNA from stained cytological smears. *J Clin Pathol* 1993; 46:378-9.

15. Dimo-Simonin N, Grange F, Brandt-Casadevall C. PCR-based forensic testing of DNA from stained cytological smears. *J Forensic Sci* 1997; 42:506-9.
16. Heid CA, Stevens J, Livak KJ, Williams PM. Real time quantitative PCR. *Genome Res* 1996; 6:986-94.
17. Nicklas JA, Buel E. Development of an Alu-based, real-time PCR method for quantification of human DNA in forensic samples. *J Forensic Sci* 2003; 48:936-44.
18. Ellis MA, Song F, Parks ET, Eckert GJ, Dean JA, Windsor LJ. An evaluation of DNA yield, DNA quantity and bite registration from a dental impression wafer. *J Am Dent Assoc* 2007; 138:1234-40; quiz 1267.
19. Harte DB. The Comprehensive Masonic Child Identification Program (CHIP). Massachusetts: North Shore District Dental Society News; 2004. p. 12-4.
20. Heldmann T. Trailing and Air-Scenting Search K-9s Inc., Colchester, CT: Witnessed and Videotaped Mar 2014.
21. Canines for Kids Inc. Available from: <http://www.caninesforkids.net>. [Last accessed on 2004 Dec 05].
22. Walsh DJ, Corey AC, Cotton RW, Forman L, Herrin GL Jr, Word CJ, *et al.* Isolation of deoxyribonucleic acid (DNA) from saliva and forensic science samples containing saliva. *J Forensic Sci* 1992;37:387-95.
23. Stavrianos C, Kafas P, Katsikogiani H, Tretiakov G, Kokkas A. Contributing in the identification of missing children: The dentist's role. *Res J Med Sci* 2010;4:128-35.
24. Sweet D, DiZinno JA. Personal identification through dental evidence-tooth fragments to DNA. *J Calif Dent Assoc* 1996; 24:35-42.
25. Jacob RF, Shalla CL. Postmortem identification of the edentulous deceased: Denture tissue surface anatomy. *J Forensic Sci* 1987; 32:698-702.
26. Whittaker DK, Macdonald DG. A Color Atlas of Forensic Dentistry. London: Wolfe Medical Publications Ltd.; 1989.
27. Schwartz TR, Schwatz EA, Mieszerski L, McNally L, Kobilinsky L. Characterization of deoxyribonucleic acid (DNA) obtained from teeth subjected to various environmental conditions. *J Forensic Sci* 1991; 36:979-90.
28. Stavrianos C, Petalotis N, Stavrianou I. Identification of missing children through dental tag. *Balk J Stom* 2006; 10:213-6.
29. Introna F, Campobasso CP. Biological versus legal age of living individual. In: Schmitt A, Cunha E, Pinheiro J, editors. *Forensic Anthropology and Medicine: Complementary Sciences from Recovery to Cause of Death*. Totowa, New Jersey: Humana Press; 2006. p. 57-82.
30. Schmeling A, Olze A, Reisinger W, Geserick G. Forensic age diagnostics of living people undergoing criminal proceedings. *Forensic Sci Int* 2004; 144:243-5.
31. Noble HW. The estimation of age from the dentition. *J Forensic Sci Soc* 1974; 14:215-21.
32. Schour I, Massler M. Development of human dentition. *J Am Dent Assoc* 1941; 28:1153-60.
33. Moorrees CF, Fanning EA, Hunt EE Jr. Age variation of formation stages for ten permanent teeth. *J Dent Res* 1963; 42: 1490-502.
34. Demirjian A, Glodstein H, Tanner JM. A new system of dental age assessment. *Hum Biol* 1973; 45:211-27.
35. Portigliatti Barbos M, Robetti I, Iorio M, Festa T. L'accertamento dell'età dentaria nel secondo decennio di vita quale contributo alla definizione della competenza dei tribunali minorili. *Riv It Med Leg* 1982; 4:863-73.
36. Nolla CM. The development of permanent teeth. *J Dent Child* 1960; 27:254-66.
37. Cameriere R, Ferrante L, Cingolani M. Age estimation in children by measurement of open apices in teeth. *Int J Legal Med* 2006; 120:49-52.
38. Kvaal SI, Kolltveit KM, Thomsen IO, Solheim T. Age estimation of adults from dental radiographs. *Forensic Sci Int* 1995; 74:175-85.
39. Drusini AG. The coronal pulp cavity index: A forensic tool for age determination in human adults. *Cuad Med Forense* 2008; 14:235-49.
40. Harris MJ, Nortjé CJ. The mesial root of the third mandibular molar. *J Forensic Odontostomatol* 1984;2:39-43.
41. Van Heerden PJ. The Mesial Root of the Third Mandibular Molar as a Possible Indicator of Age. Dissertation for Diploma in Forensic Odontology. London: London Hospital Medical College; 1985.
42. Gilsanz V, Osman R. Hand Bone Age: A Digital Atlas of Skeletal Maturity. Berlin, Heidelberg, New York: Springer-Verlag; 2005.
43. Schmeling A, Baumann U, Schmidt S, Wernecke KD, Reisinger W. Reference data for the Thiemann-Nitz method of assessing skeletal age for the purpose of forensic age estimation. *Int J Legal Med* 2006;120:1-4.
44. Adams BJ. Establishing personal identification based on specific patterns of missing, filled, and unrestored teeth. *J Forensic Sci* 2003; 48:487-96.
45. Grand Lodge of Massachusetts Masonic Youth Child Identification Program. Available from: <http://www.mychip.org>. [Last accessed on 2012 Jun 23].
46. National Child Identification Program. Available from: <http://www.childidprogram.com>. [Last accessed on 2012 Dec 15].
47. Tesini DA, Harte DB. Anatomy of a properly taken toothprints thermoplastic bite impression. *J Mass Dent Soc* 2005; 54:22.

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