

# Endodontiai izolálás

A napi praxisgyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)

Krajczár Károly  
PTE KK Fogászati és Szájsebészeti Klinika

## QUALITY GUIDELINES

# **Quality guidelines for endodontic treatment: consensus report of the European Society of Endodontology**

European Society of Endodontology

## Isolation of tooth

Root canal treatment procedures should be carried out only when the tooth is isolated by rubber dam to: prevent salivary and bacterial contamination, prevent inhalation and ingestion of instruments and prevent irrigating solutions escaping into the oral cavity.



# AAE POSITION STATEMENT

*The following statement was prepared by the AAE Clinical Practice Committee. AAE members may photocopy this position statement for distribution to patients or referring dentists.*

## DENTAL DAMS

The American Association of Endodontists is dedicated to excellence in the art and science of endodontics and to the highest standards of patient care. The accumulated clinical knowledge and judgment of the practitioner supported by evidence-based scientific research is the basis for endodontic treatment. **Tooth isolation using the dental dam is the standard of care; it is integral and essential for any nonsurgical endodontic treatment.**

A **dental dam is a latex or nonlatex sheet** with a hole punched in the material to allow placement around the tooth during the endodontic procedure. One of the primary objectives of endodontic treatment is **disinfection** of the root canal system. **Only dental dam isolation minimizes the risk of contamination of the root canal system** by indigenous oral bacteria. The dental dam also offers other benefits, such as **aiding in visualization** by providing a clean operating field and **preventing ingestion or aspiration of dental materials, irrigants and instruments.**

A napi praxis9

# Guide to Clinical Endodontics

Sixth Edition

Email: [info@aae.org](mailto:info@aae.org)

f [facebook.com/endodontists](https://facebook.com/endodontists)

t [@SavingYourTeeth](https://twitter.com/SavingYourTeeth)

YouTube [youtube.com/rootcanalspecialists](https://youtube.com/rootcanalspecialists)

W [www.aae.org](http://www.aae.org)

## Dental Dams

### Indications for Treatment

Tooth isolation using the dental dam is the standard of care; it is integral and essential for any nonsurgical endodontic treatment. One of the primary objectives of endodontic treatment is disinfection of the root canal system. Only dental dam isolation minimizes the risk of contamination of the root canal system by indigenous oral bacteria. The dental dam also offers other benefits, such as aiding in visualization by providing a clean operating field and preventing ingestion or aspiration of dental materials, irrigants and instruments.



No rubberdam,  
no endo

Gygy. Csongor



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# BMJ Open

## Discordance between presumed standard of care and actual clinical practice: the example of rubber dam use during root canal treatment in the National Dental Practice-Based Research Network

2015;5:e009779. doi:10.1136/bmjopen-2015-009779

Gregg H Gilbert,<sup>1</sup> Joseph L Riley,<sup>2</sup> Paul D Eleazer,<sup>3</sup> Paul L Benjamin,<sup>4</sup> Ellen Funkhouser,<sup>5</sup> National Dental PBRN Collaborative Group

**Conclusions:** General dentists have substantial variation in attitudes about rubber dam use. Beliefs that rubber dam use is not effective, inconvenient, time-consuming, not easy to place or affected by patient factors were independently and significantly associated with lower rubber dam use. These attitudes explain why there is substantial discordance between presumed standard of care and actual practice.



RESEARCH ARTICLE

Open Access



# Why dentists don't use rubber dam during endodontics and how to promote its usage?

Ahmad A. Madarati

**Table 1** Frequency of rubber dam use

Respondents	Use of rubber dam (%)		Total
	Yes	No	
Endodontists	28 (84.8 %)	5 (15.2 %)	33 (100 %)
Endodontics Postgraduate Students	9 (100 %)	0 (0 %)	9 (100 %)
GDPs	33 (21.6 %)	120 (78.4 %)	153 (100 %)
Other	8 (57.1 %)	6 (42.9 %)	14 (100 %)
Total	78 (37.3 %)	131 (62.7 %)	209 (100 %)

**Table 2** Reasons for not using rubber dam (%)

Respondents	Difficult use	Time consuming	Not available at work	Others	Total
Endodontists	0	0	80	20	100
GDPs	23.3	16.7	39.2	20.8	100
Others	0	16.7	33.3	50	100
Total	21.4	16	40.5	22.1	100

**Table 7** Rubber dam use according to type (place) of work (%)

Respondents	Private	Academic	Government
GDP	60.8 (9.7)	0.6	38.3 (37.9)
Endodontists	27.3 (55.6)	24.2 (100)	48.5 (93.8)
Endo Postgraduate students	0 (0)	0 (0)	37.5 (100)
Other	31.6 (33.3)	21.1 (66.7)	42.1 (80)
Total	51.5 (14.8)	5.6 (90)	40.3 (53.7)

The values in parentheses represent proportion of respondents who currently use RD



# Attitudes and use of rubber dam by Irish general dental practitioners

C. D. Lynch<sup>1</sup> & R. J. McConnell<sup>2</sup>

<sup>1</sup>Division of Adult Dental Health, School of Dentistry, Cardiff University, Cardiff, UK; <sup>2</sup>University Dental School & Hospital, Wilton, Cork, Ireland

Reported use (percentage in brackets refers to number of cases)	Anterior teeth, <i>n</i> (%)	Premolar teeth, <i>n</i> (%)	Molar teeth, <i>n</i> (%)
Never (0%)	114 (39)	84 (32)	51 (26)
Rarely (1–25%)	51 (17)	36 (14)	24 (12)
Occasionally (26–50%)	6 (2)	18 (6)	15 (7)
Often (51–75%)	18 (6)	6 (2)	12 (6)
Mostly (76–99%)	27 (9)	36 (14)	18 (9)
Always (100%)	78 (27)	84 (32)	78 (40)
Total	294 (100)	264 (100)	198 (100)

# THE USE OF RUBBER DAM AMONG CZECH DENTAL PRACTITIONERS

*Martin Kapitán, Zdeňka Šustová*

Charles University in Prague, Faculty of Medicine and University Hospital Hradec Králové, Czech Republic: Department of Dentistry  
ACTA MEDICA (Hradec Králové) 2011; 54(4):144–148

**Tab. 2:** Reported use of rubber dam in different materials and treatment

Material/ treatment	Regularly n (%)	Occasion- ally n (%)	Never n (%)
Amalgam	10 (2)	43 (10)	392 (88)
Composite resin	39 (9)	100 (22)	309 (69)
Glassionomer cement	16 (4)	64 (14)	366 (82)
Root canal treatment	42 (9)	76 (17)	329 (74)

# Influence of rubber dam on objective and subjective parameters of stress during dental treatment of children and adolescents – a randomized controlled clinical pilot study

PATRICIA AMMANN<sup>1</sup>, ANDREAS KOLB<sup>2</sup>, ADRIAN LUSSI<sup>1</sup> & RAINER SEEMANN<sup>1,3</sup>

<sup>1</sup>Department of Preventive, Restorative and Pediatric Dentistry, University of Bern, Bern, Switzerland, <sup>2</sup>Dental Practice Dr. Andreas Kolb, Heide (Holstein), Germany, and <sup>3</sup>Universitätsmedizin Charité, Berlin, Germany

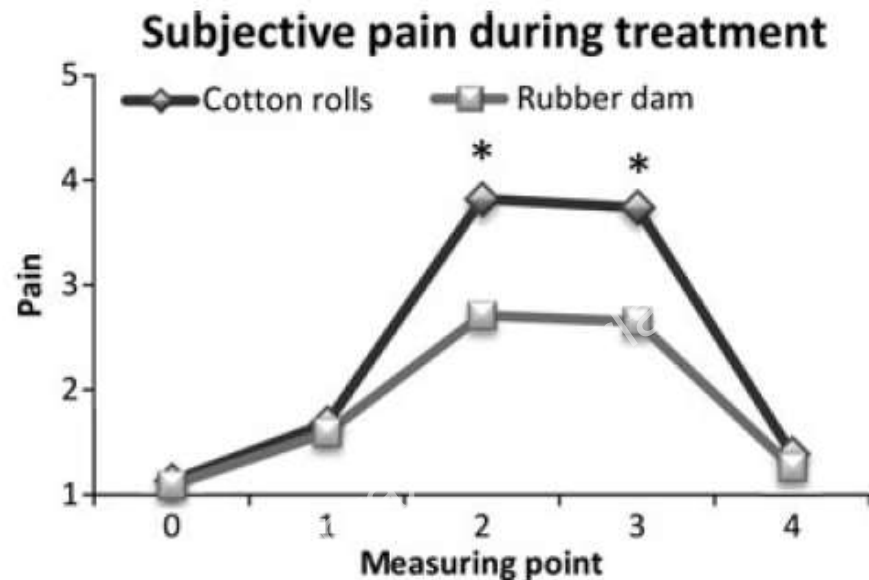


Fig. 1. Patient's subjective pain perception (1 = no pain and 10 = strong pain) (\* $P < 0.05$ ). See Table 1 for explanation of measuring points.

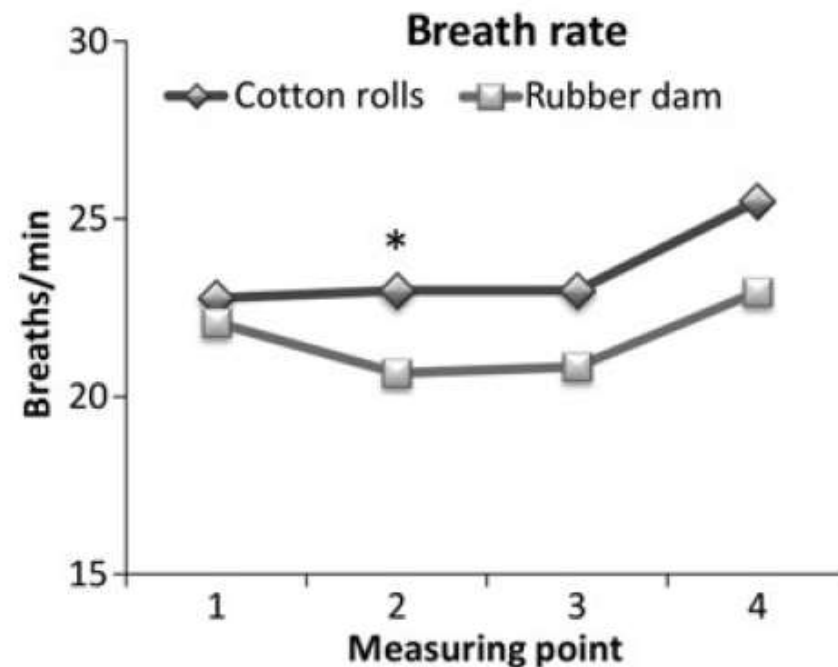
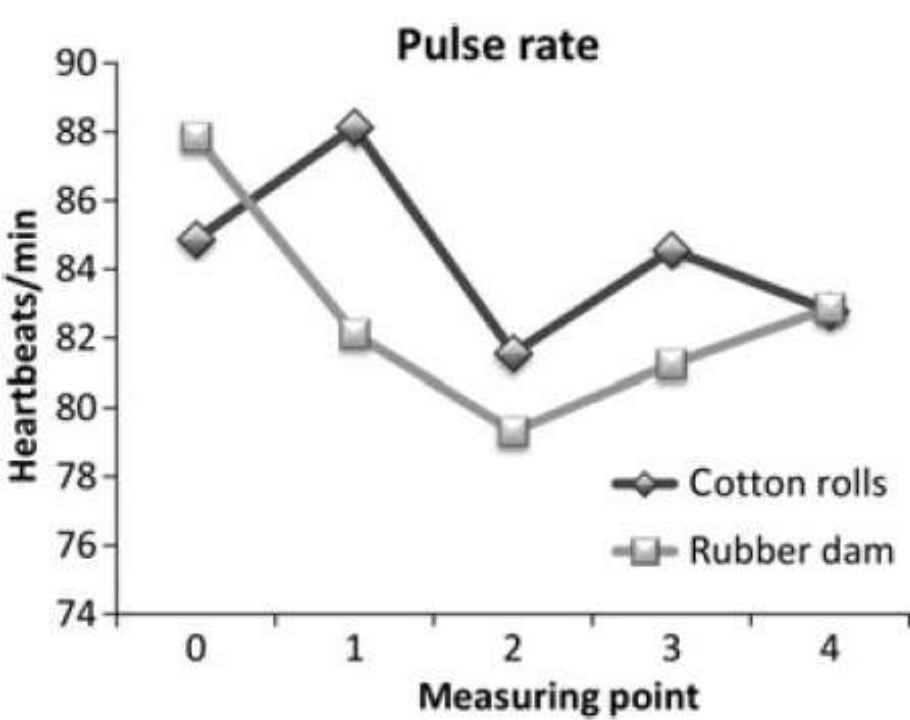


Fig. 2. Patient's breath rate (\* $P < 0.05$ ).





3. Patient's pulse rate.

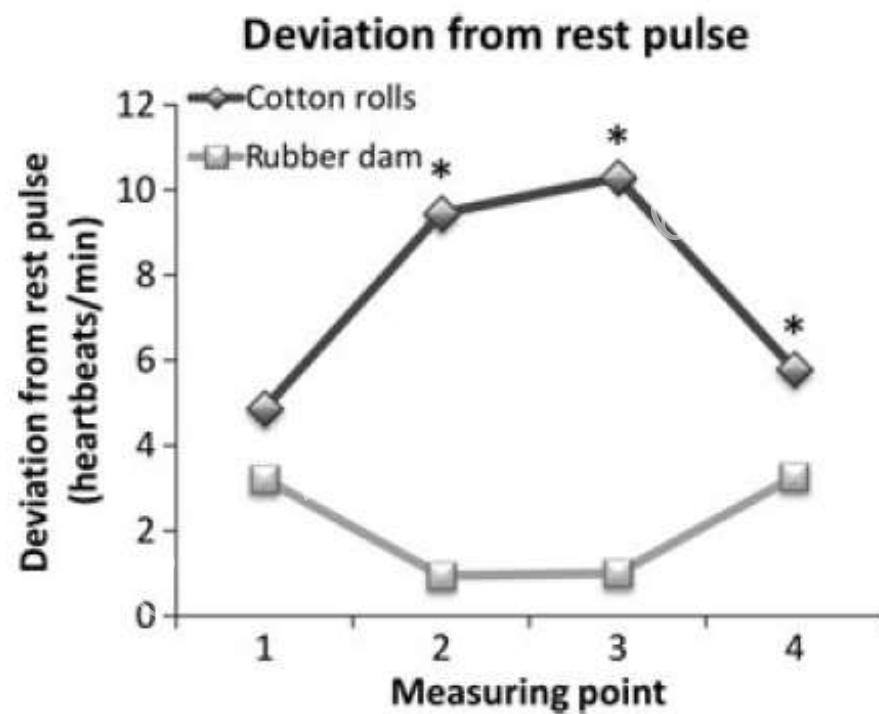


Fig. 5. Deviation from operator's rest pulse (\* $P < 0.05$ ).

**Conclusion.** Isolation with rubber dam caused less stress in children and adolescents compared to relative isolation with cotton rolls if applied by an experienced dentist.

# Figyelembe venni:

Latex **allergia**: szilikon lepedő.

**Szájlégzők**: „elcsúsztatott” keret elhelyezés a  
szájnyílás részleges szabadonhagyásával

**Biszfosfonát** terápia

A napi praxisgyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)

# Bisphosphonates and their clinical implications in endodontic therapy

International Endodontic Journal, 46, 391–398, 2013

A.-T. Moinzadeh<sup>1</sup>, H. Shemesh<sup>1</sup>, N. A. M. Neirynck<sup>2</sup>, C. Aubert<sup>3</sup> & P. R. Wesselink<sup>1</sup>

Endodontic therapy has not been identified as a significant risk factor for promoting BRONJ and is therefore considered as the favoured alternative to extraction



A one minute mouth rinse with chlorhexidine prior to the start of the treatment would lower the bacterial load of the oral cavity (Cousido *et al.* 2010) and aim at decreasing the bacteremia caused by any soft tissue trauma.



Working under aseptic conditions is mandatory. This includes steps such as the removal of caries and leaking restorations, the cleaning of the tooth and the placement of a rubber dam prior to the start of the intracanal procedures. The proper adap-

Particular care should be given to avoid any damage to the gingival tissues during the placement of a rubber dam clamp (Kyrgidis 2009). An alterna-



# Kofferdam felhelyezése Szárnyas technika







9T



2AT



2T



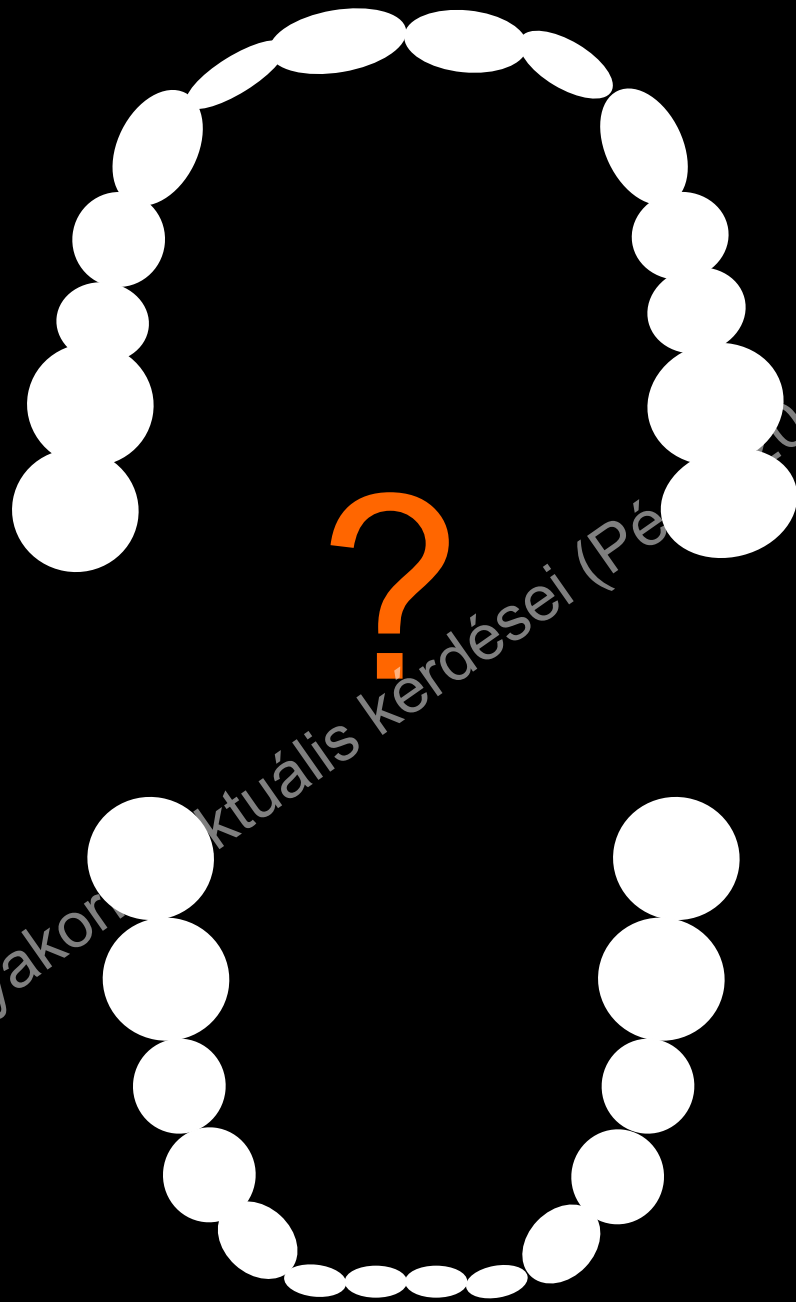
56T



14T

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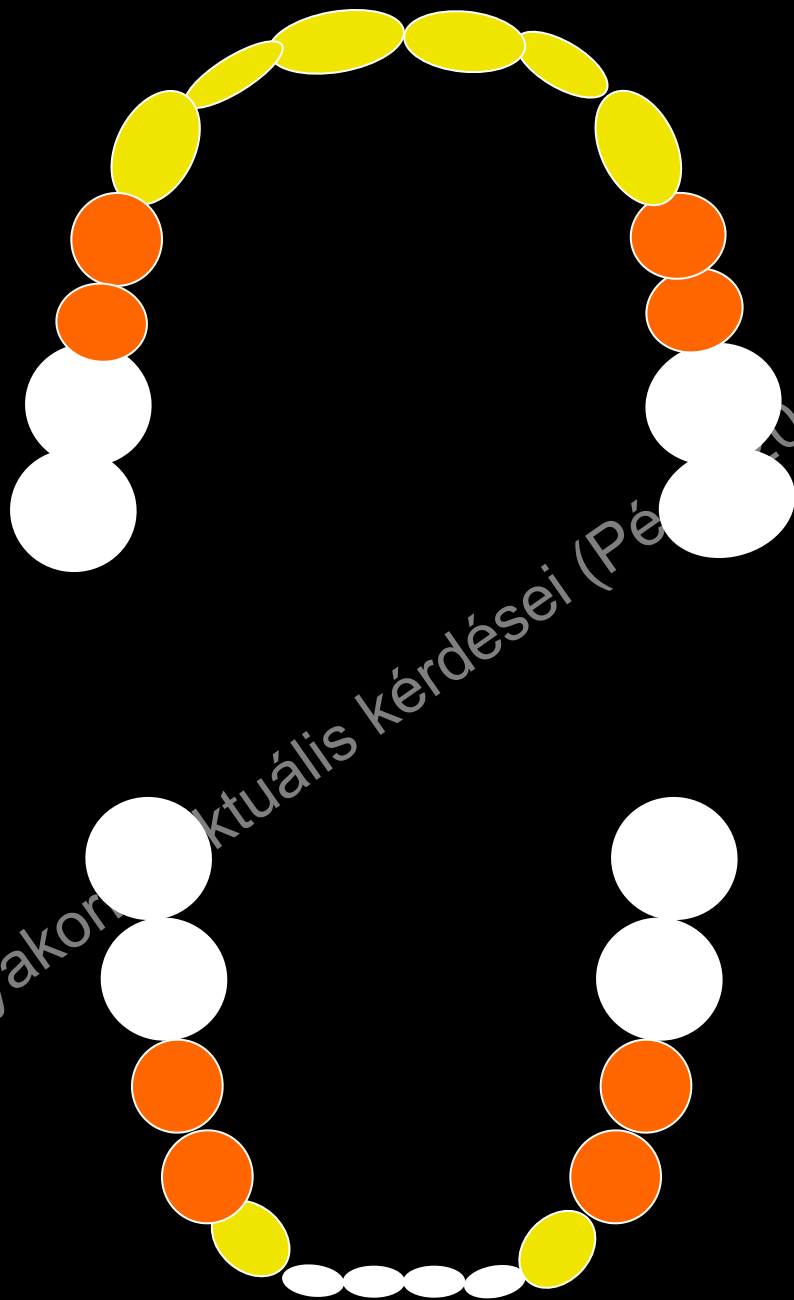




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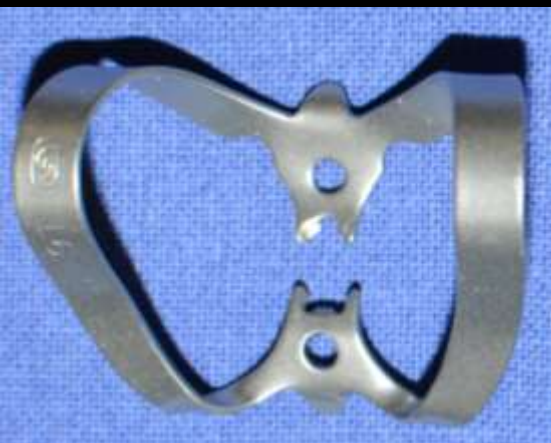


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# Tömítő anyagok



A napi praxisgyakorlat







A napi praxisgyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)







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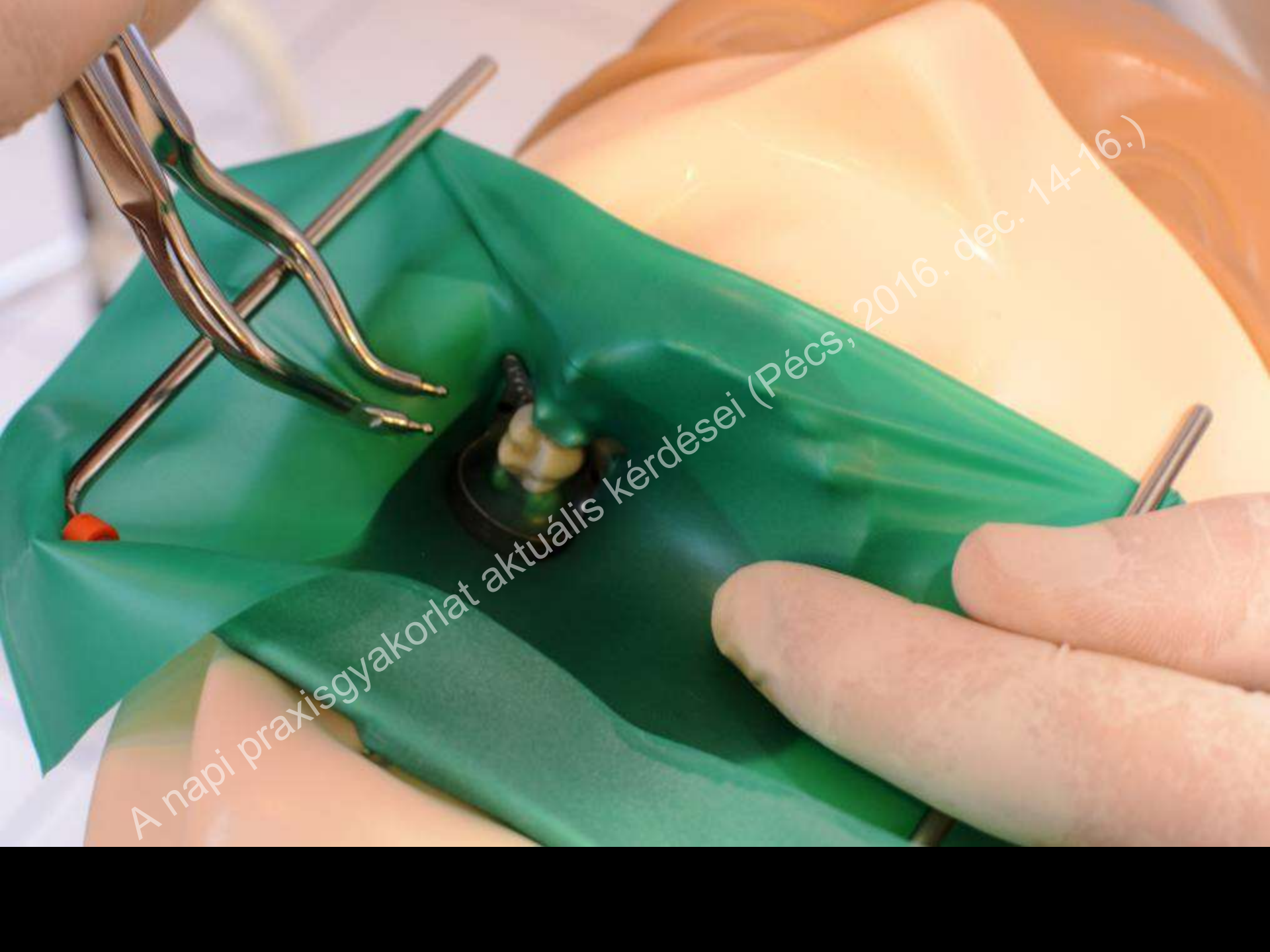


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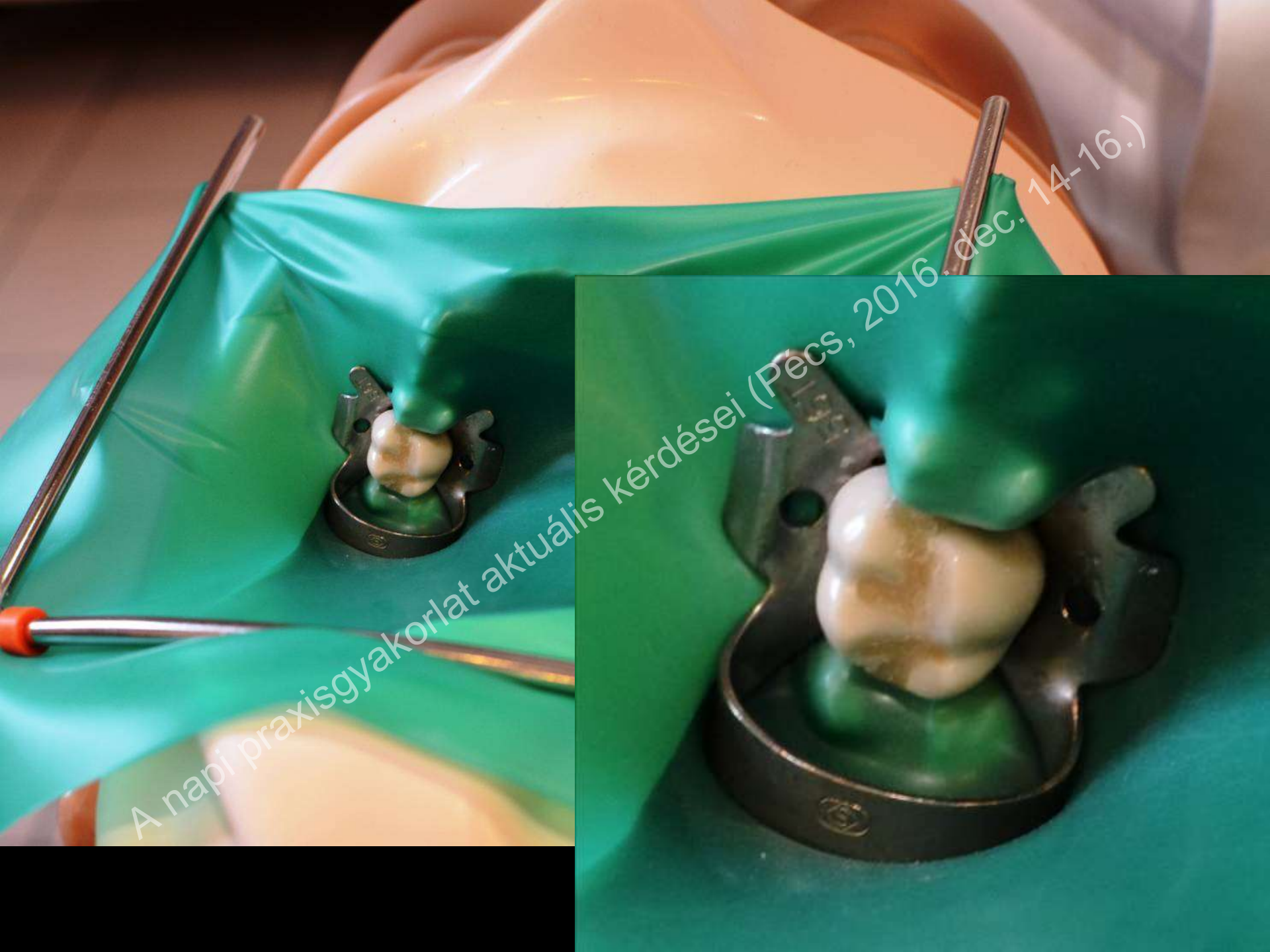


A napi fogorvosi gyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)





A napi praxisgyakorlat aktuális kérdései (Pécs, 2014-16.)



A napi praxisgyakorlat aktuális kérdései (Pecs, 2016. dec. 14-16.)





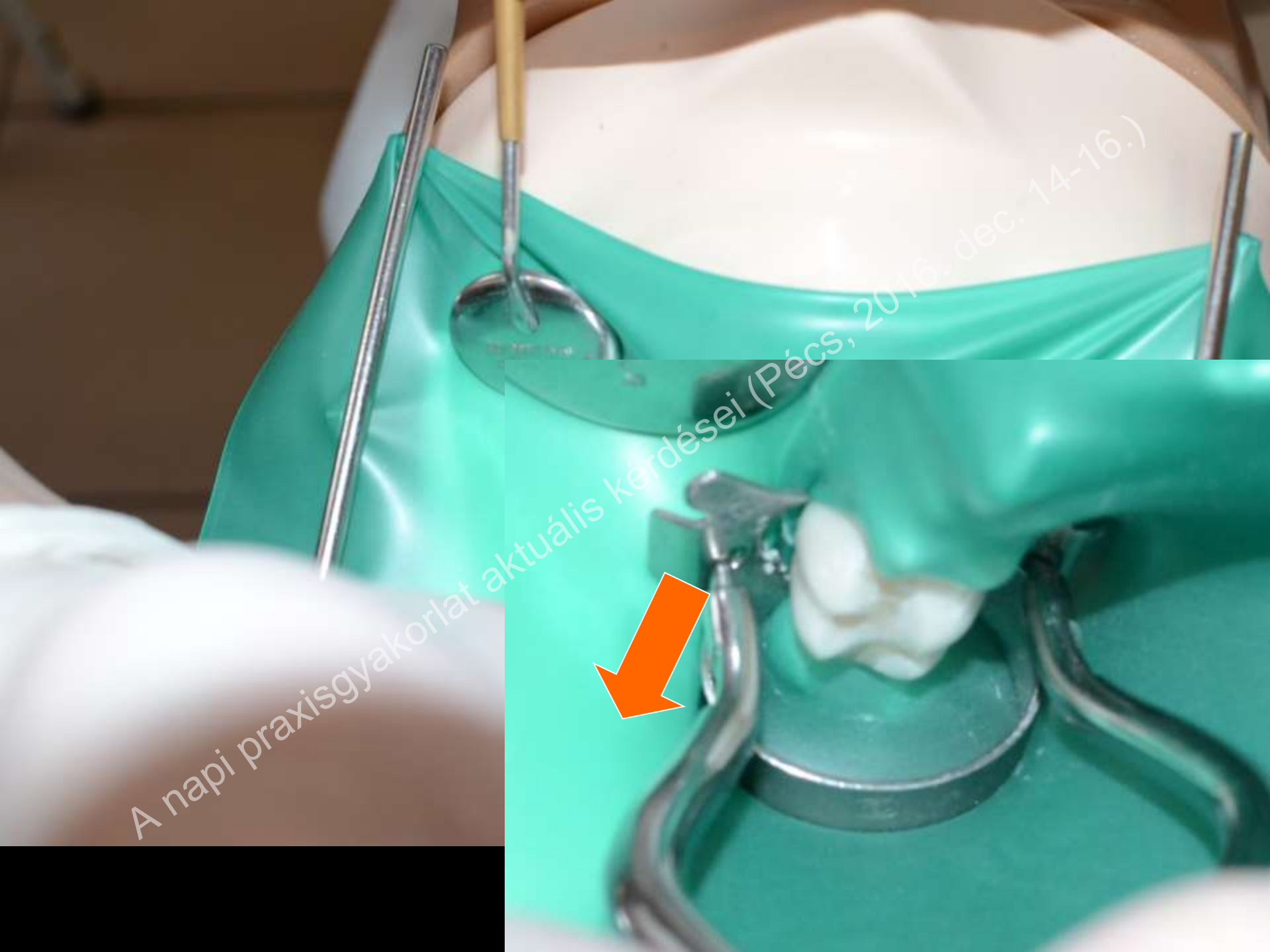
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aktuális kérdései (Pécs, 2016. dec. 14-16.)

A napi



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# Klinikai esetek

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# Izolálás kiegészítő felépítés nélkül



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A napi praxisgyakorlati kérdések (Pécs, 2016. dec. 14-16.)

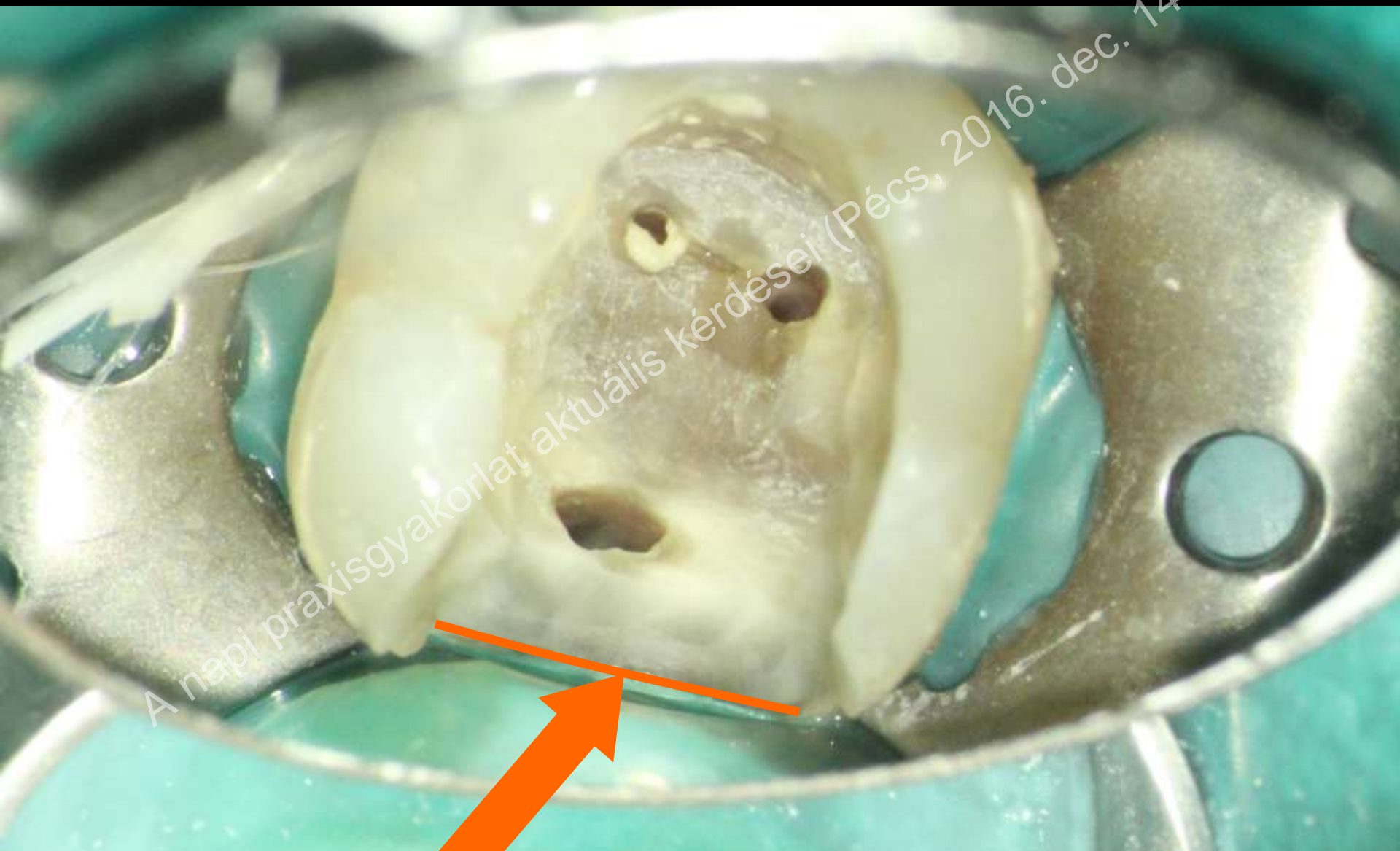


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# Marginális szivárgás



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# Preendodontiai felépítés



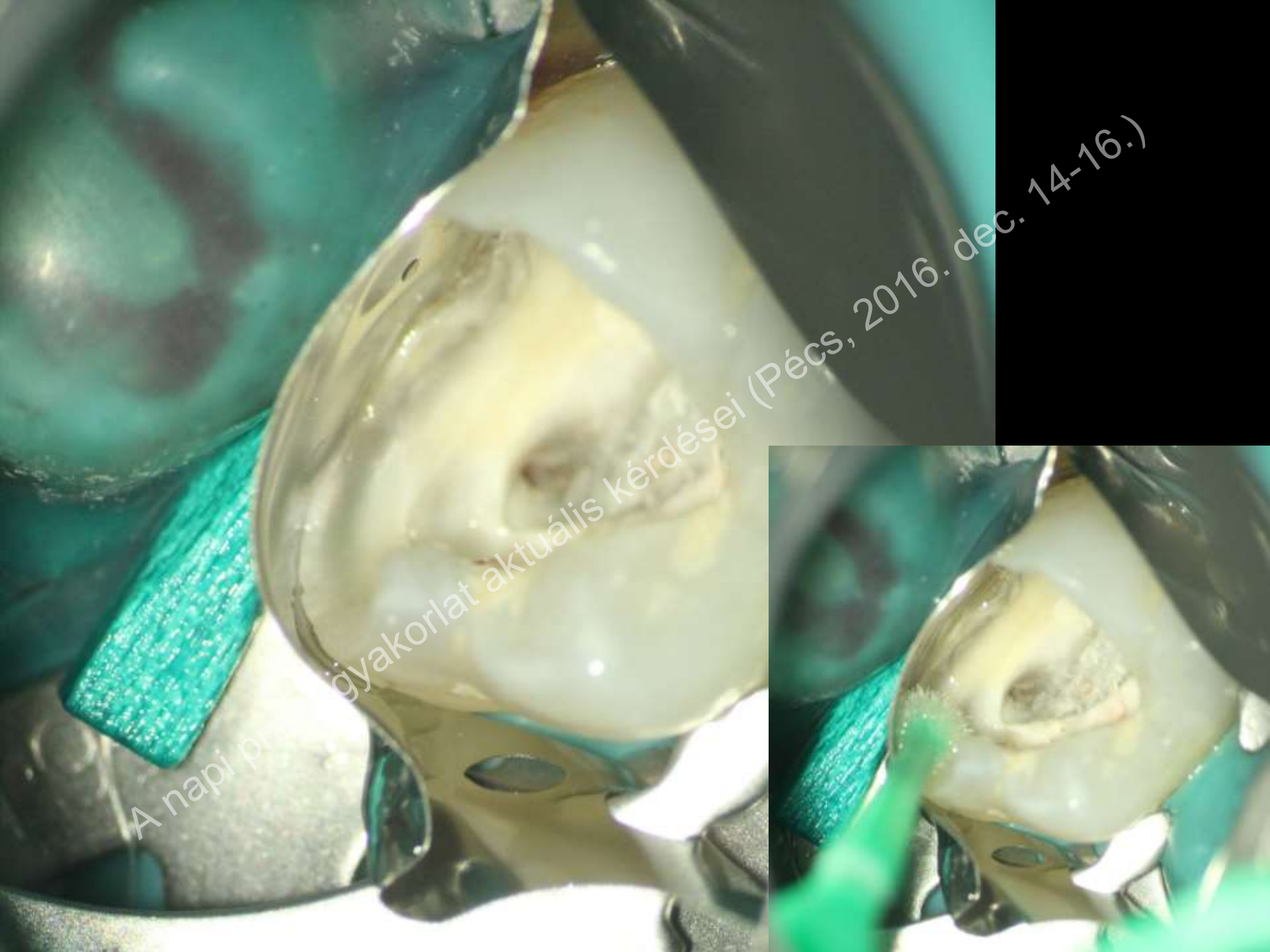


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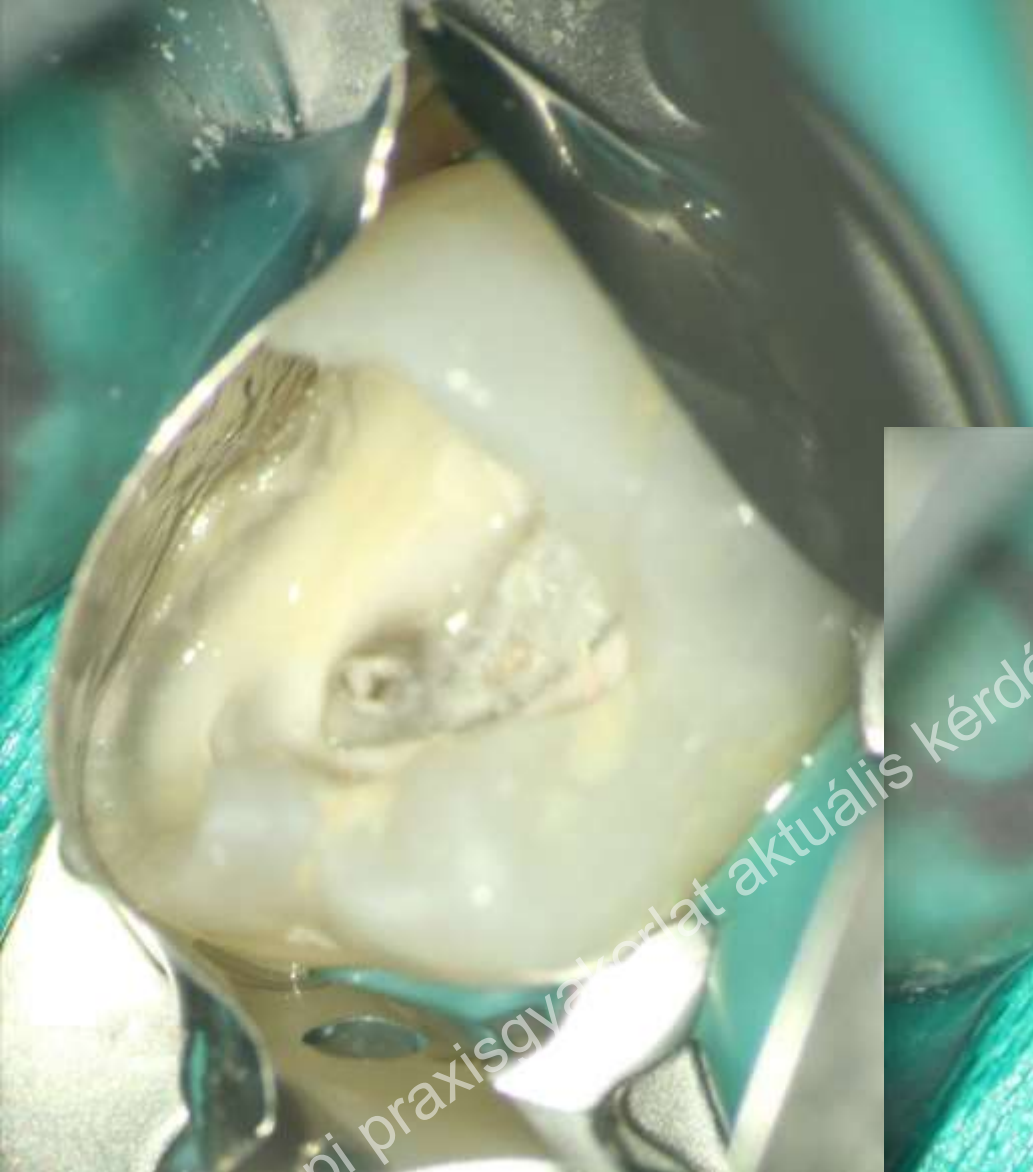




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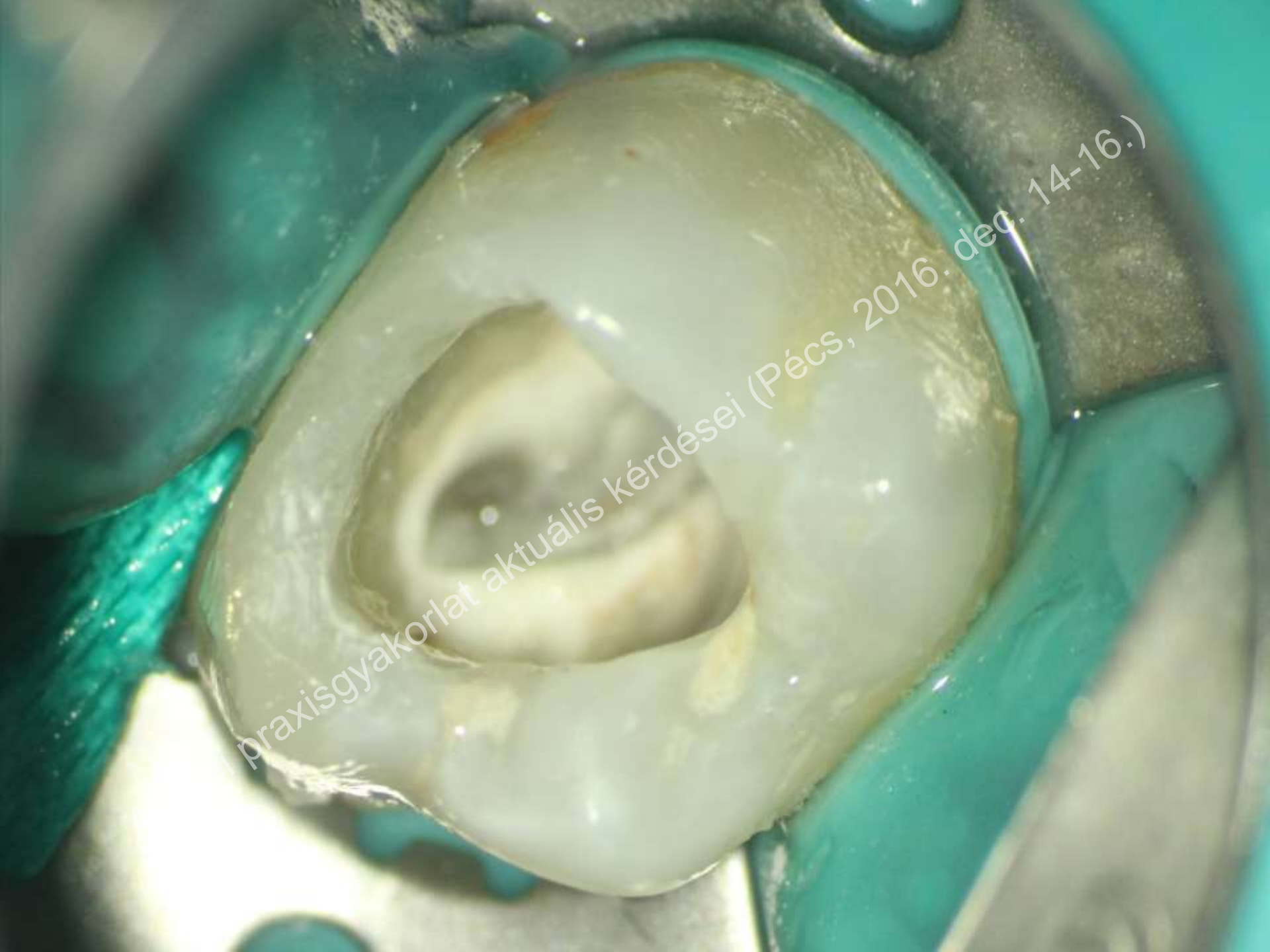


A napi praxi gyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)



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praxisgyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)



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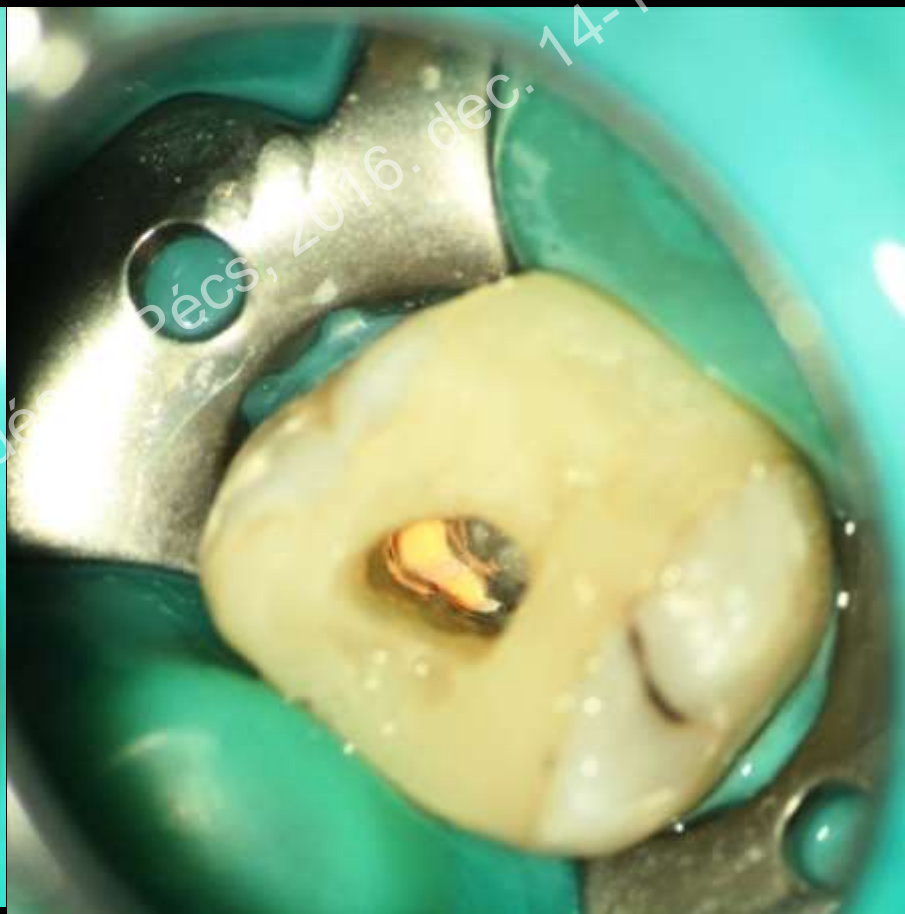


A négyaxisgyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)



# Koronális restauráció megtartása

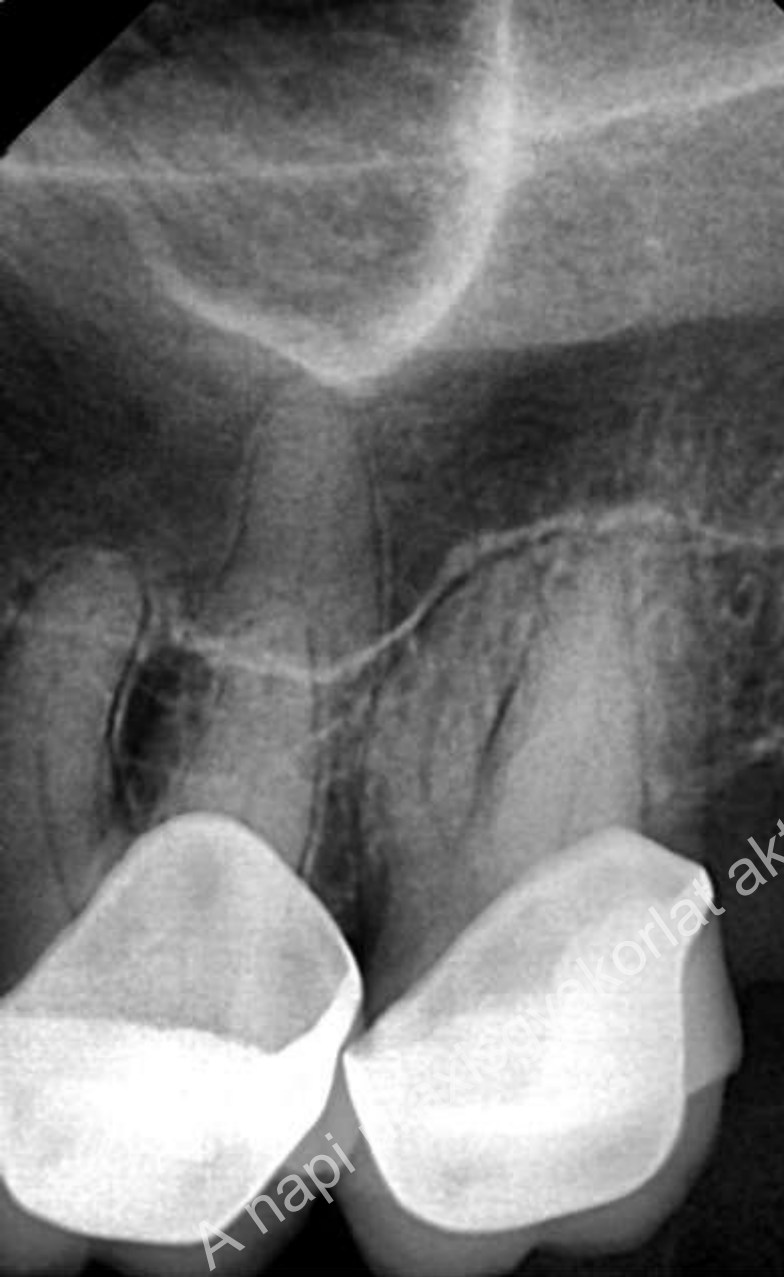




A napi praxisgyakorlat aktuális kérdései (Bécs, 2016. dec. 14-16.)







A napi

aktuális kérdései (Pécs, 2016. dec. 14-16.)



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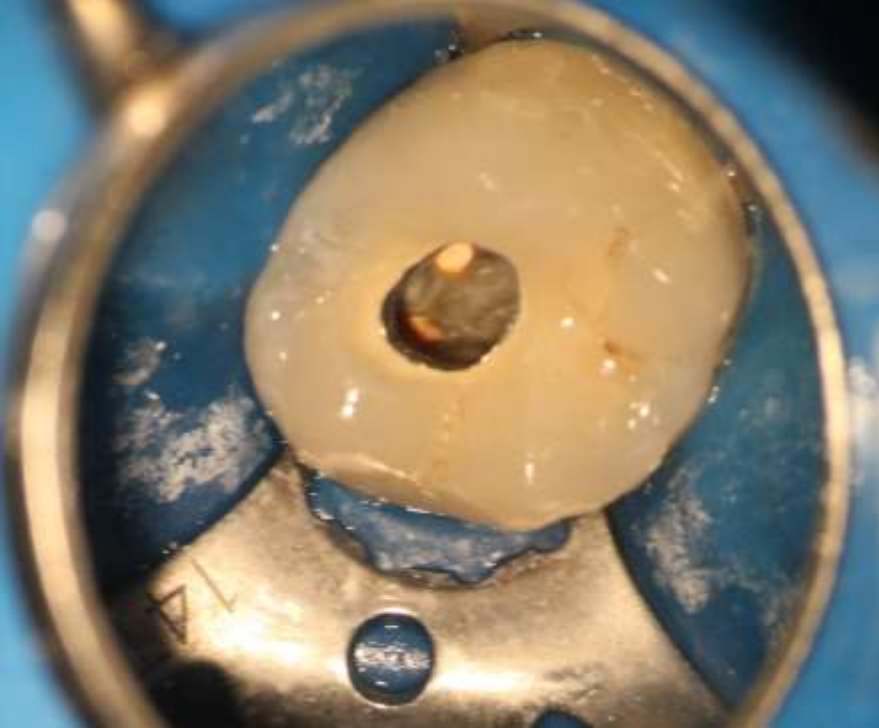
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# Átöblítéskor elszívás!

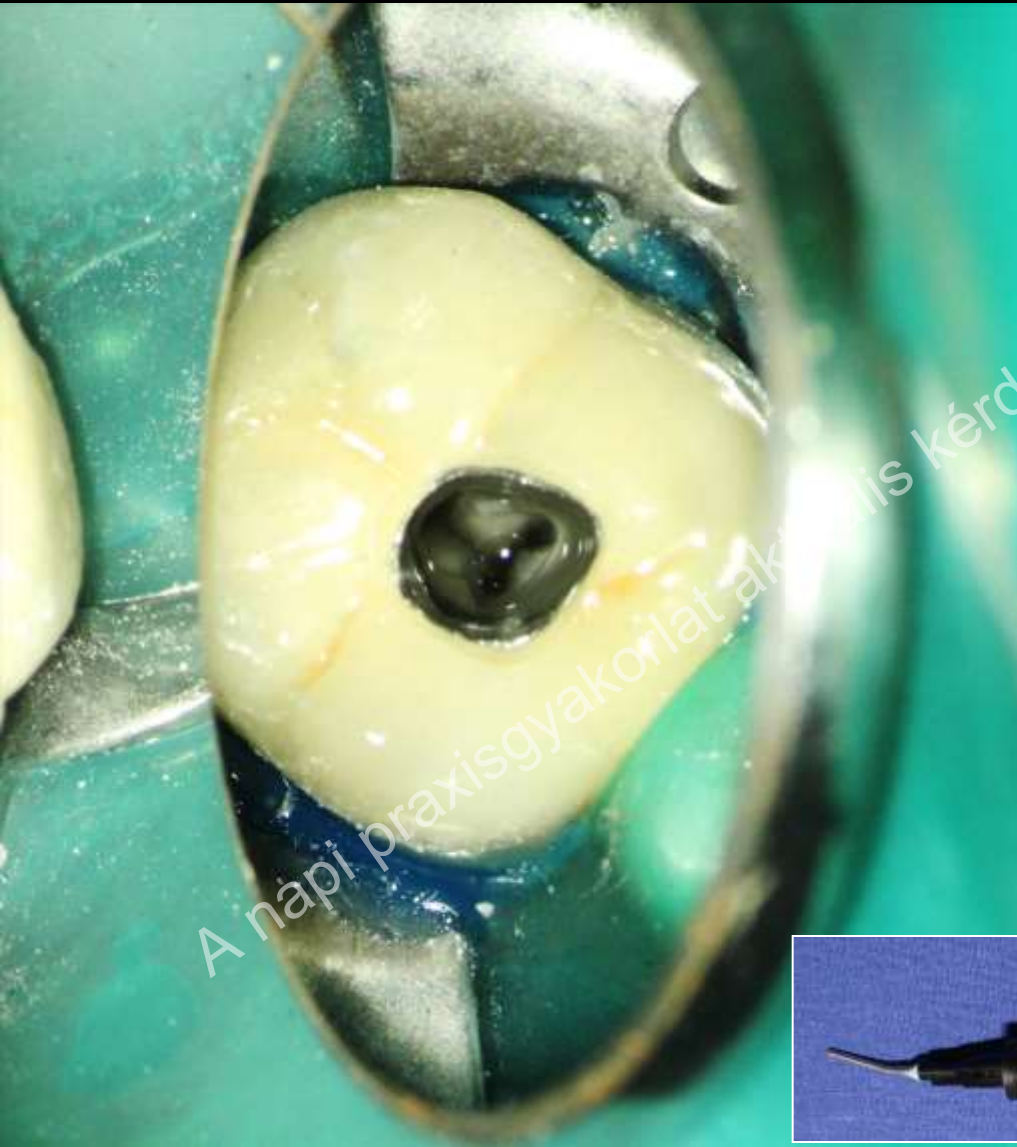


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# Hídorgony korona izolálása







A napi praxisgyakorlat aktuális képei (Pécs, 2016. dec. 14-16.)

# Előkészített csonk izolálása



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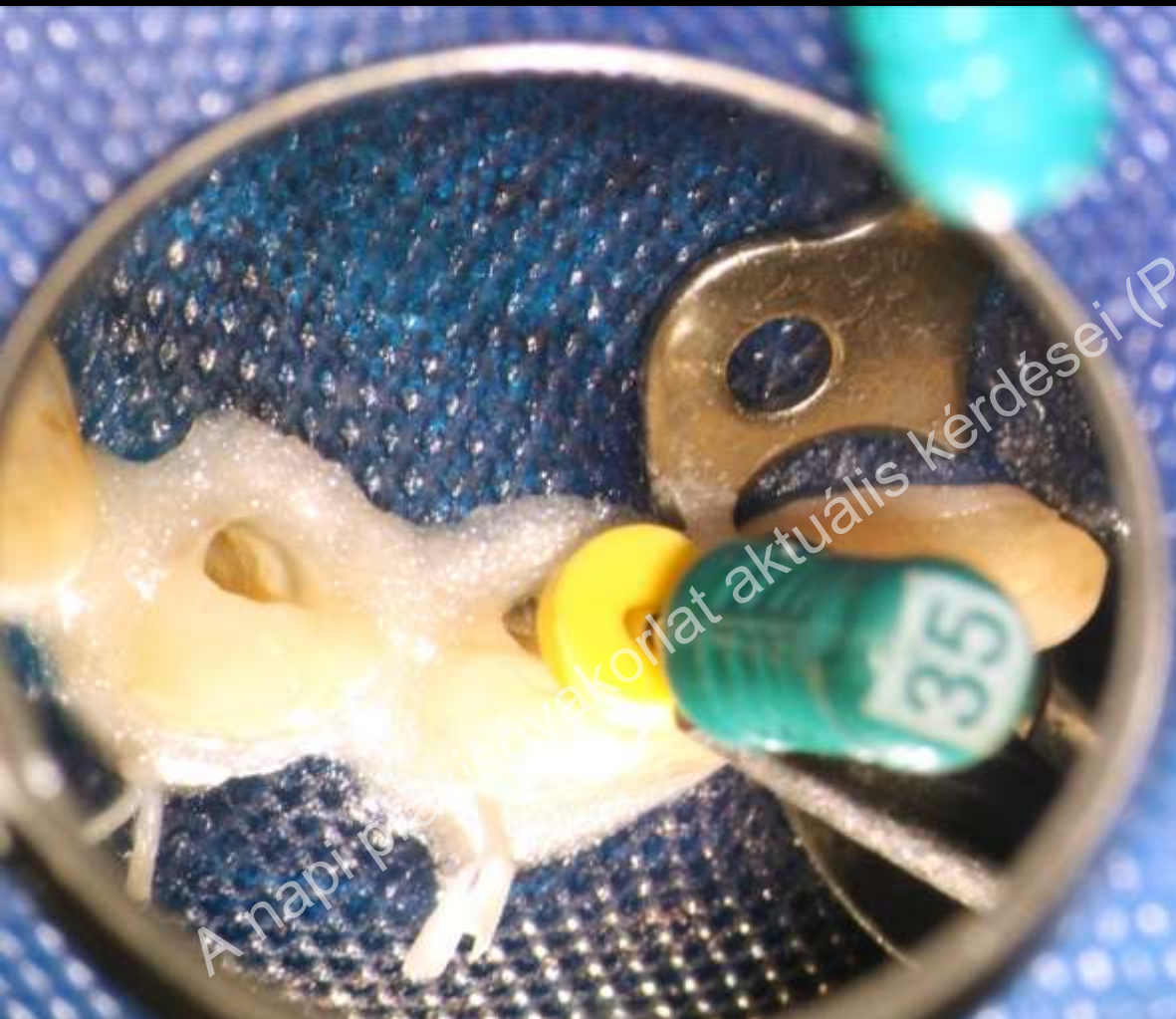
# Több fog izolálása















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# Fogszabályozó készülék







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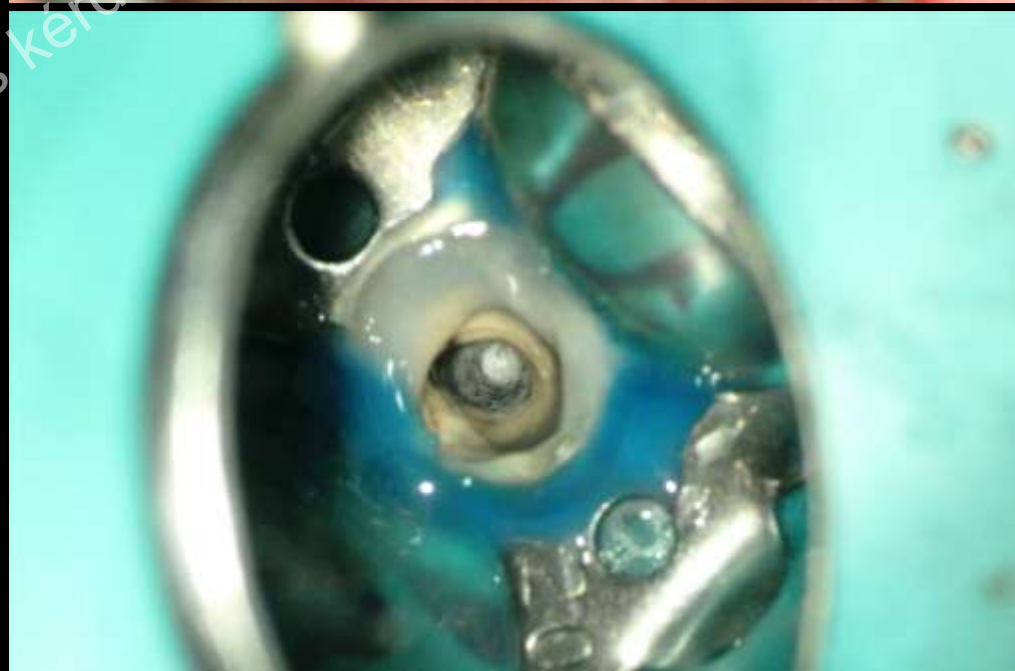


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# Nehéz kapocsrögzítés





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# Összefoglalás

Kofferdam izolálás **kötelező**.

Sokan **mégsem alkalmazzák**.

Egyszerű **alaptechnika (szárnyas)**.

Előfordul izolálási nehézség.

A napi praxisgyakorlat aktuális kérdései (Pécs, 2016. dec. 14-16.)

**Destruált fog helyreállíthatósága is kérdéses.**

## **Quality guidelines for endodontic treatment: consensus report of the European Society of Endodontology**

International Endodontic Journal, 39, 921–930, 2006

European Society of Endodontology

doi:10.1111/j.1365-2591.2006.01180.x

### *Contra-indications for root canal treatment*

- 1 Teeth that cannot be made functional nor restored.
- 2 Teeth with insufficient periodontal support.
- 3 Teeth with poor prognosis, uncooperative patients or patients where dental treatment procedures cannot be undertaken.
- 4 Teeth of patients with poor oral condition that cannot be improved within a reasonable period.



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**Köszönöm a figyelmet!**