

The PUL Concept

Dr Elie CALLABE

Manufacturing Quality

Accommodates to the Protocol

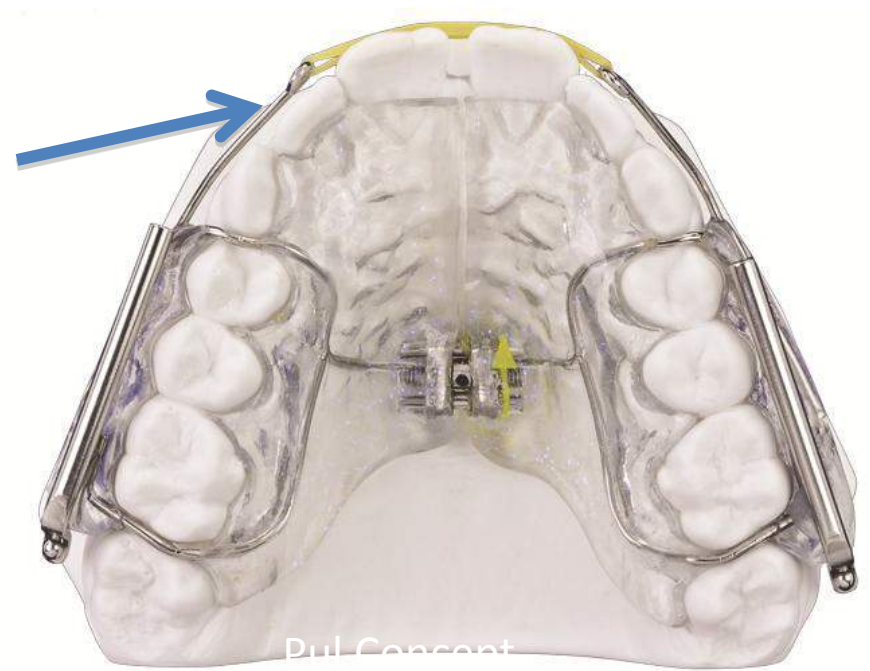
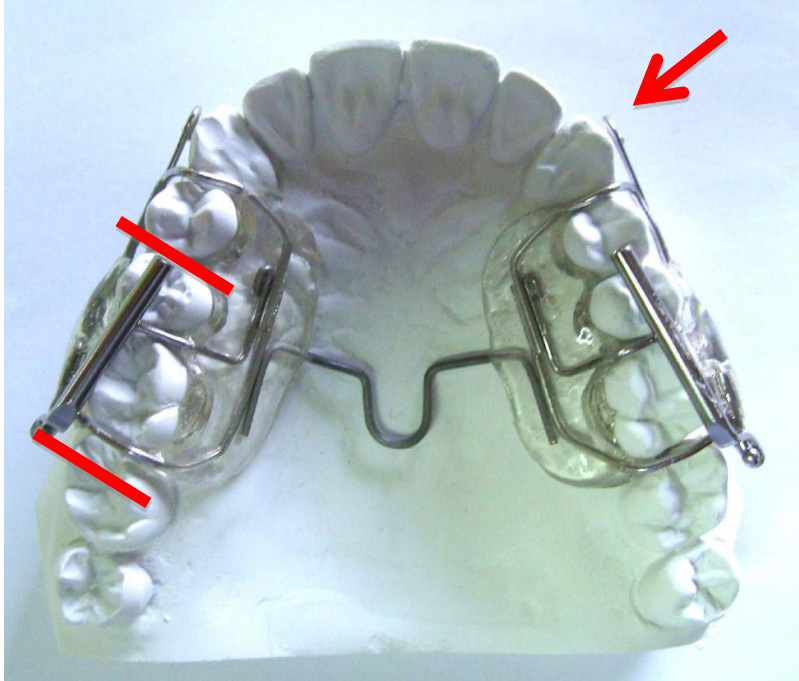
Appliance Reliability

Efficient treatment

www.pulconcept.com

QUIZZ : Find the mistake (The answer is on the next slide)



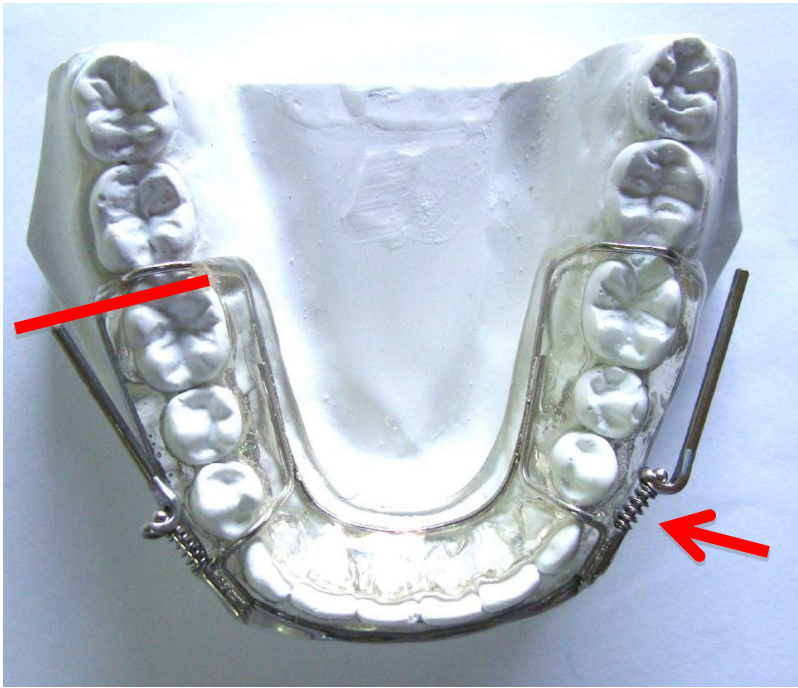


1-The hook for the elastic should be mesial to 12 and 22

2- The protraction system has been cut too short (the rods will disengage in the mouth)

QUIZZ: Find the mistake (The answer is on the next slide)

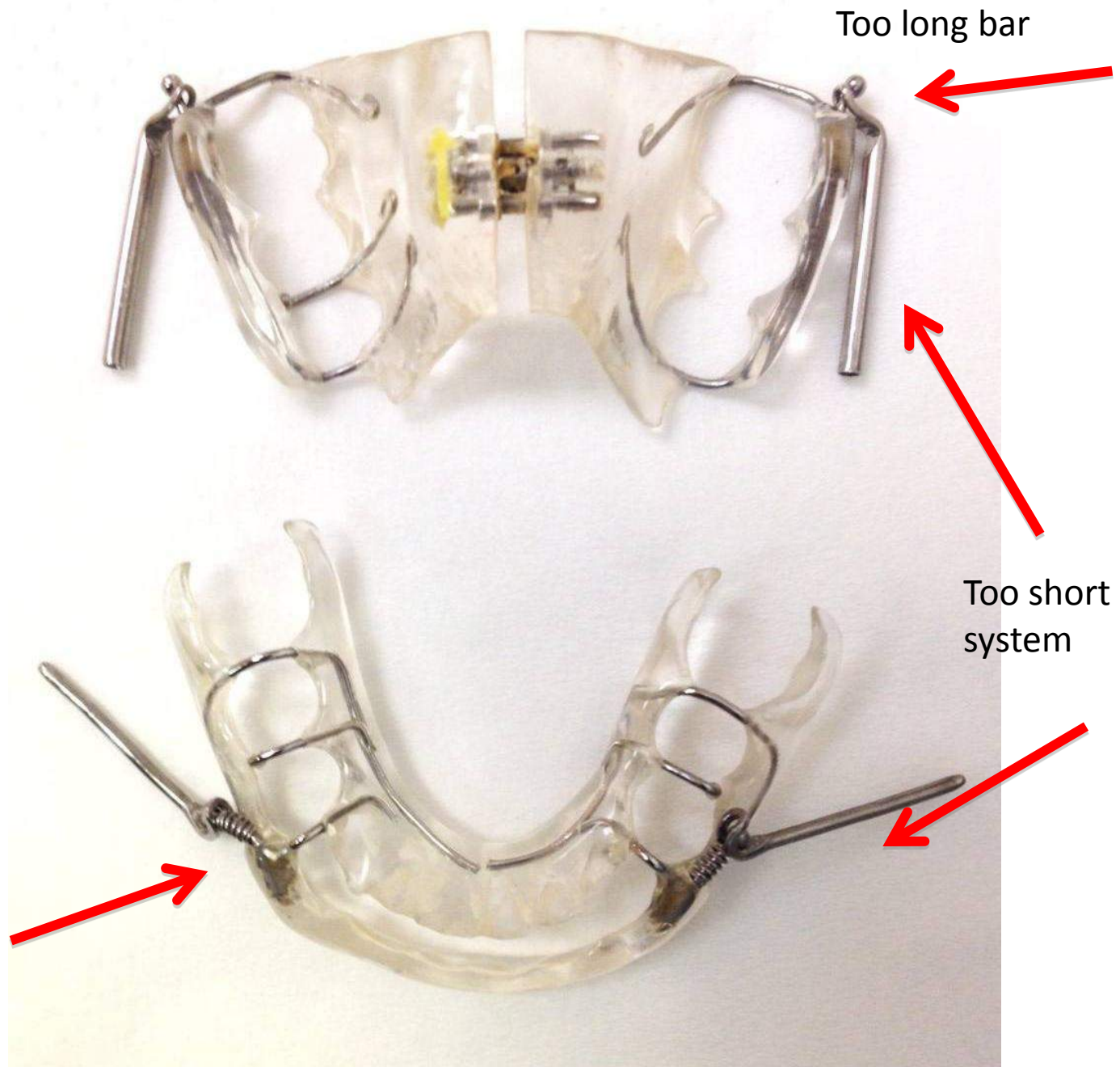


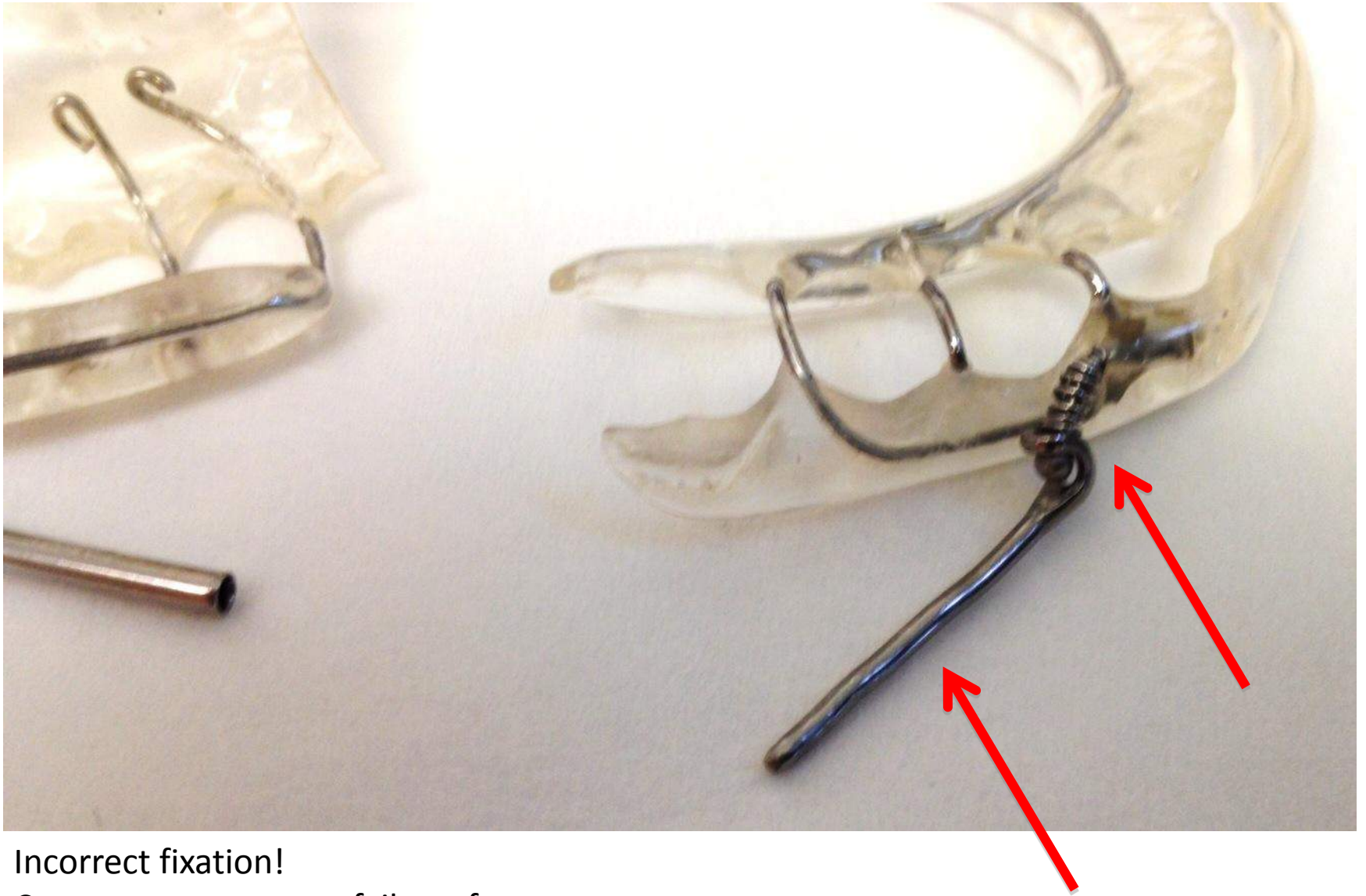


- 1- The mandibular spring needs to be semi-embedded in the tube so the support bar is as short as possible. The spring is not obligatory.
- 2- The protraction system is too short (consequence of point 1)

QUIZZ: Find the mistake (The answer is on the next slide)







Incorrect fixation!
Consequence: system failure, fracture
= orthodontist and patient both disappointed

Advice:

- Embed the mandibular springs in the tube by drilling a 1.5 mm opening (with a 2 mm bur) and reduce the length of the support bar by slightly compressing the coil while folding the bar.
- This will allow for the use of a longer rod.
- If the 2nd upper molars are present, place the upper framework more posterior in order to keep a longer rod, and in many cases there will not be need to cut it.

With regards to the hooks for the anterior elastic:

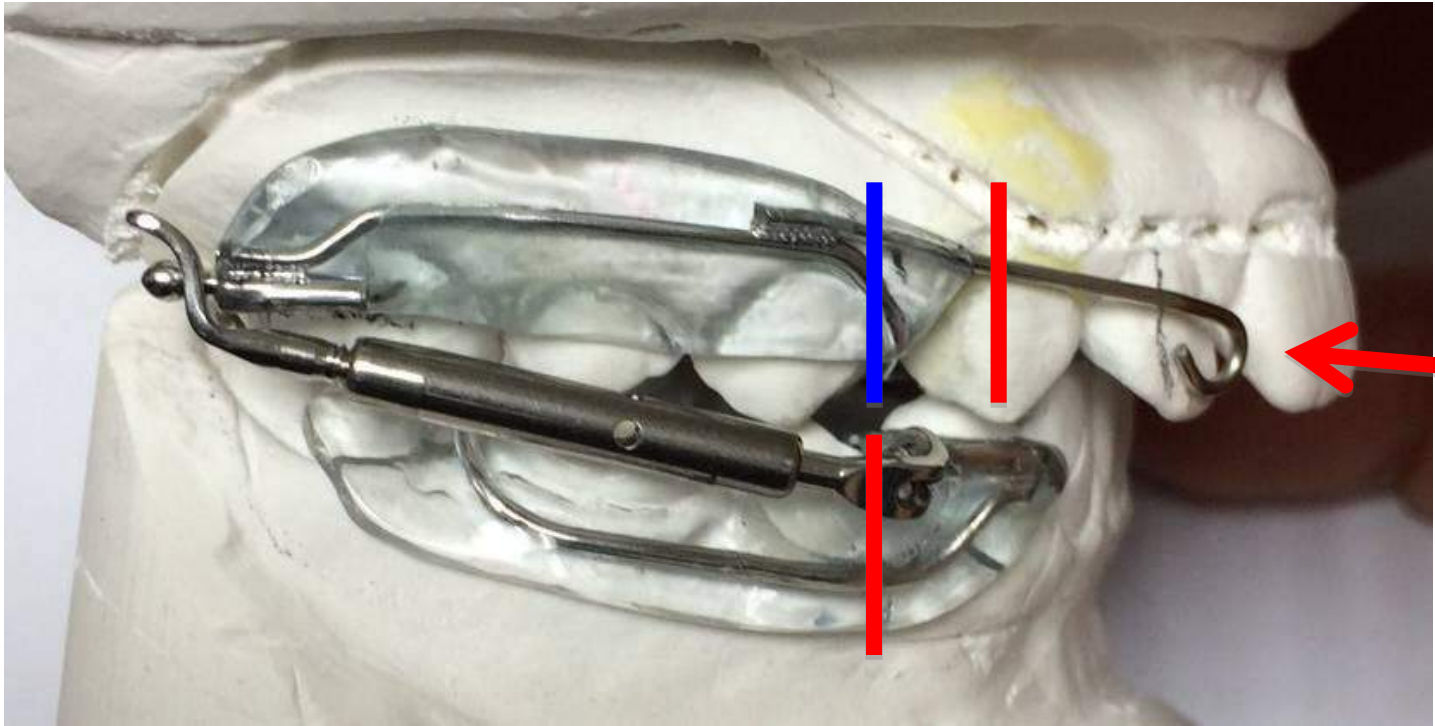
- The hooks for the anterior elastic must be located at the mesial 1/3rd of teeth 12 and 22 to avoid excessive stress on the incisors which might tip them lingually. This is important also because the patient finds it easier to fit the elastic.
- We recommend avoiding the use of an anterior elastic when using a Coffin spring since it has the adverse effect of causing anterior constriction.
- It is always preferable to use the anterior elastic with an upper splint with a screw, with a resin contour behind the incisors in order to prevent lingual tipping.

QUIZZ: Find the mistake (The answer is on the next slide)

PUL 2

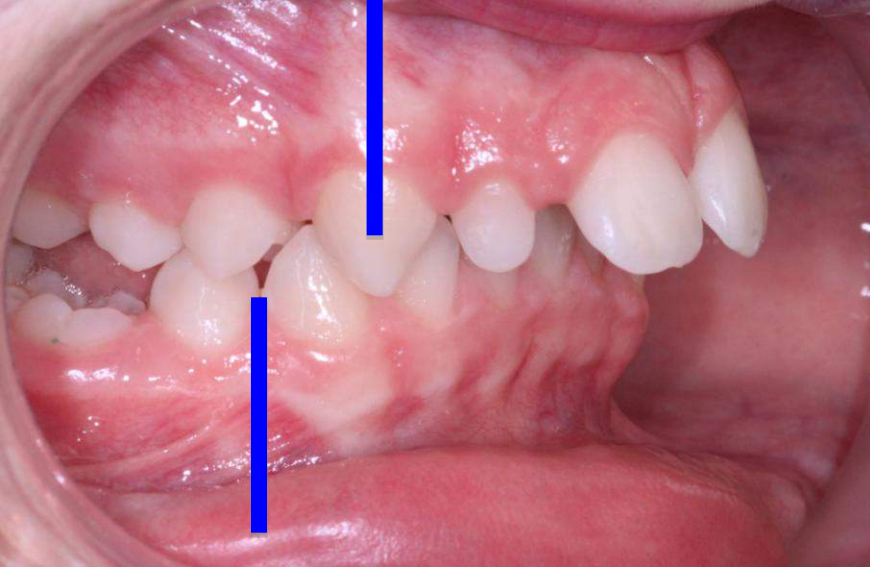
Class II division 1 Case





Mistake :

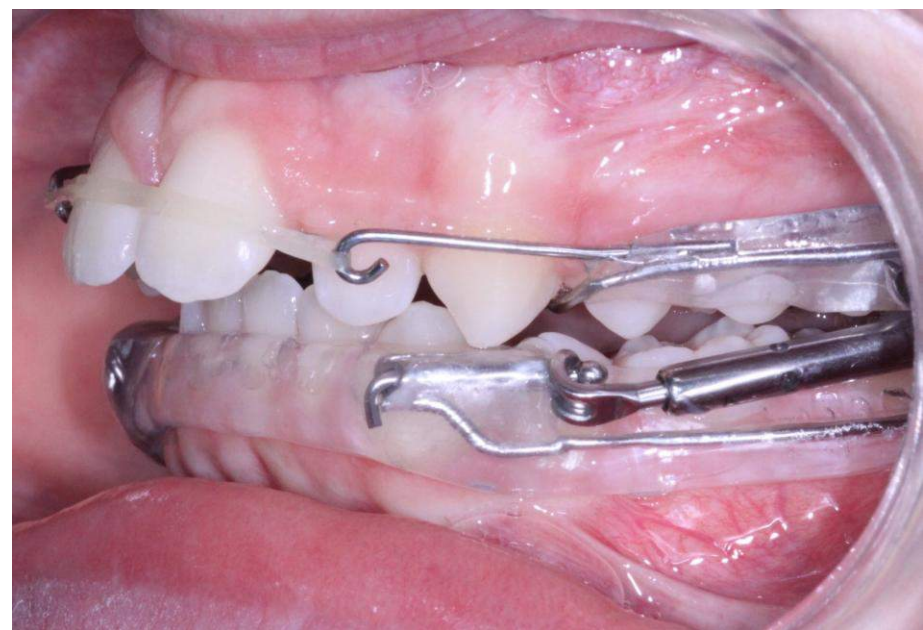
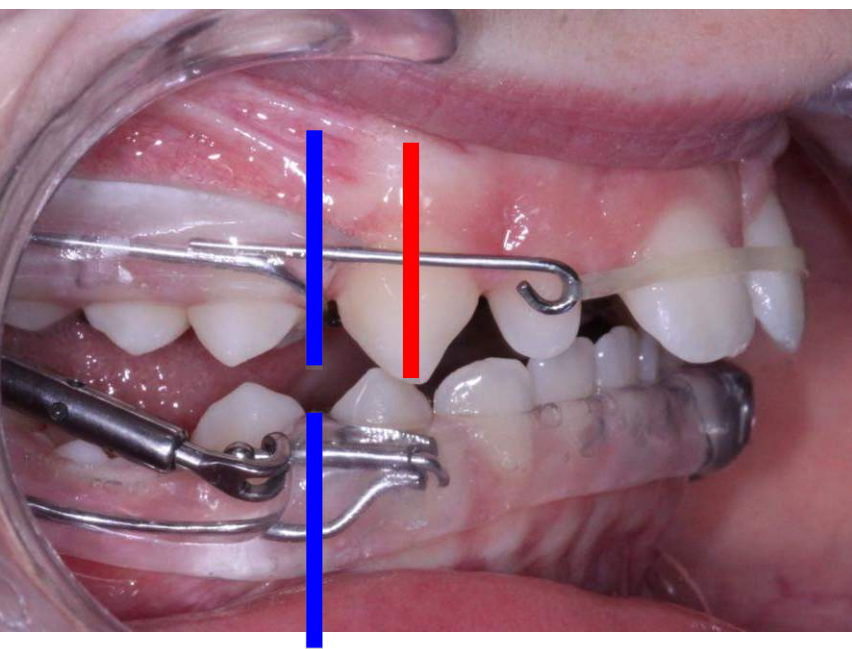
- 1- Insufficient protraction. First premolars must be in Class I.
- 2- Hooks for the elastic, too low.



Insufficient
Protraction



Good



QUIZZ: Find the mistake (The answer is on the next slide)

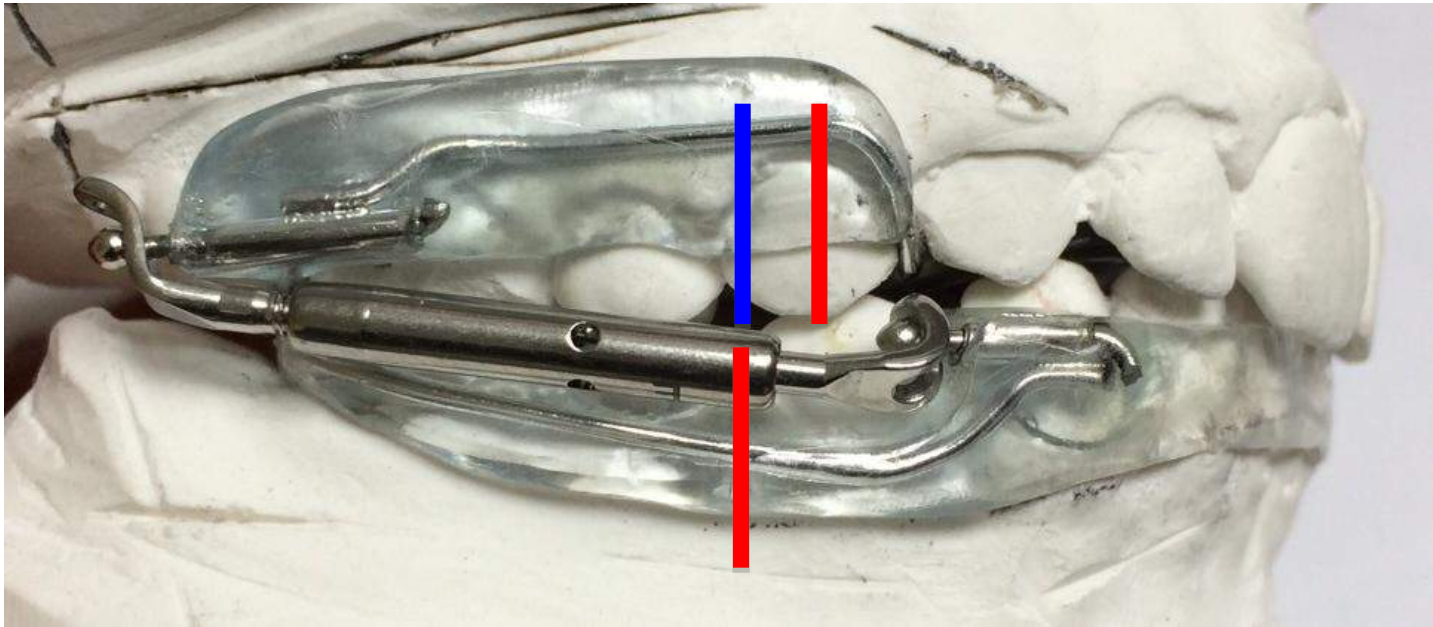
PUL 2

Clase II division 2 Case



PUL 2

Class II division 2 Case



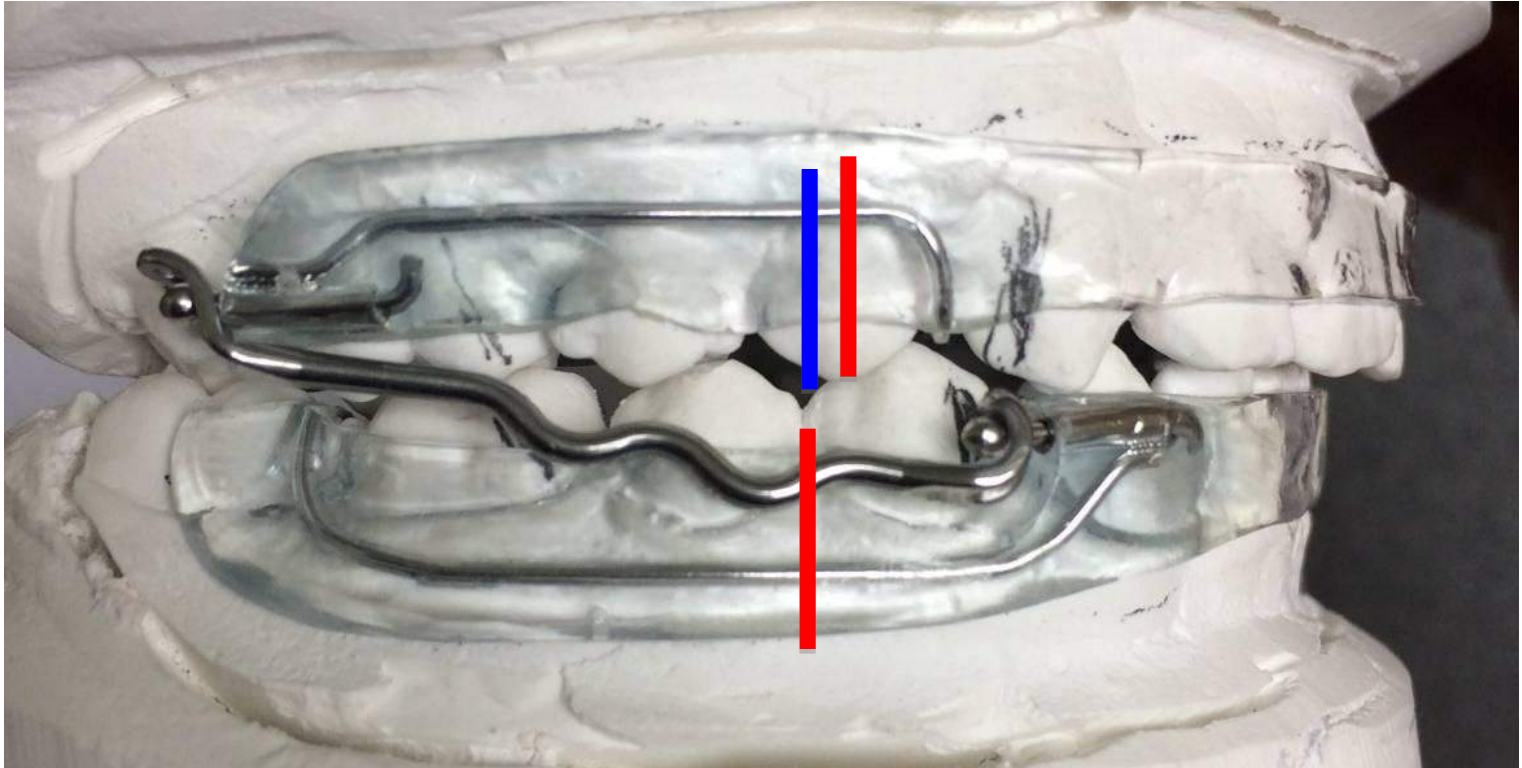
Mistake: Insufficient protraction. First premolars need to be in Class I, which will cause anterior incisors to be on an end on relationship.

QUIZZ: Find the mistake (The answer is on the next slide)

Retention W PUL

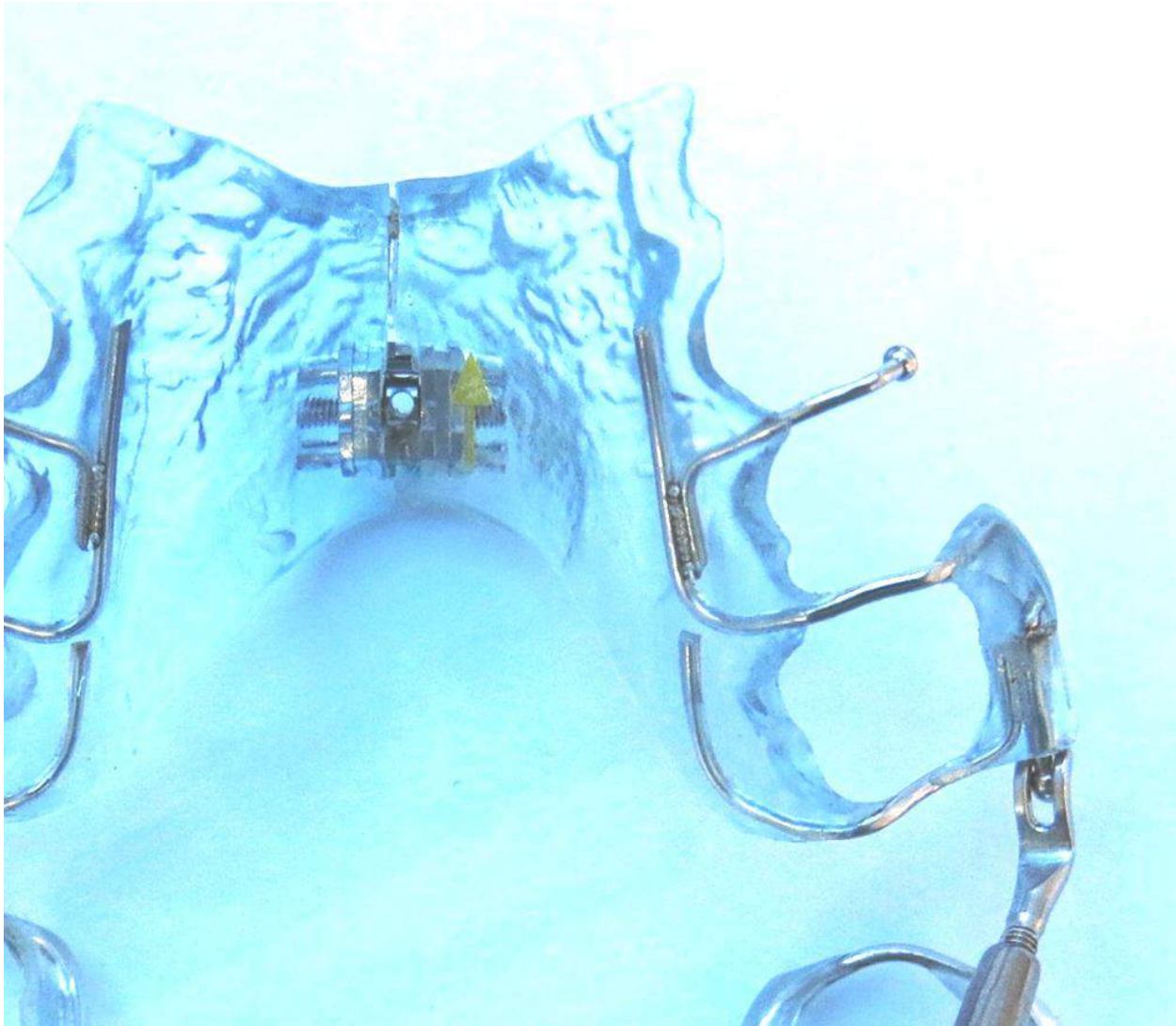


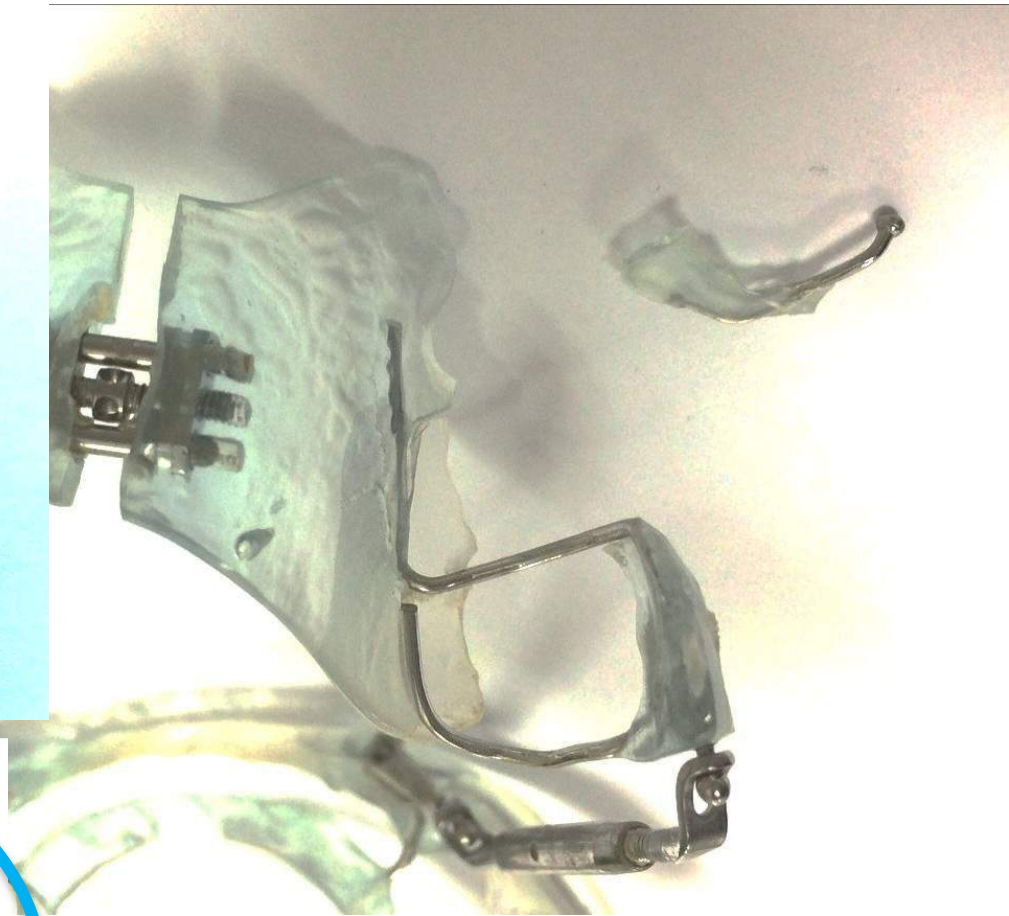
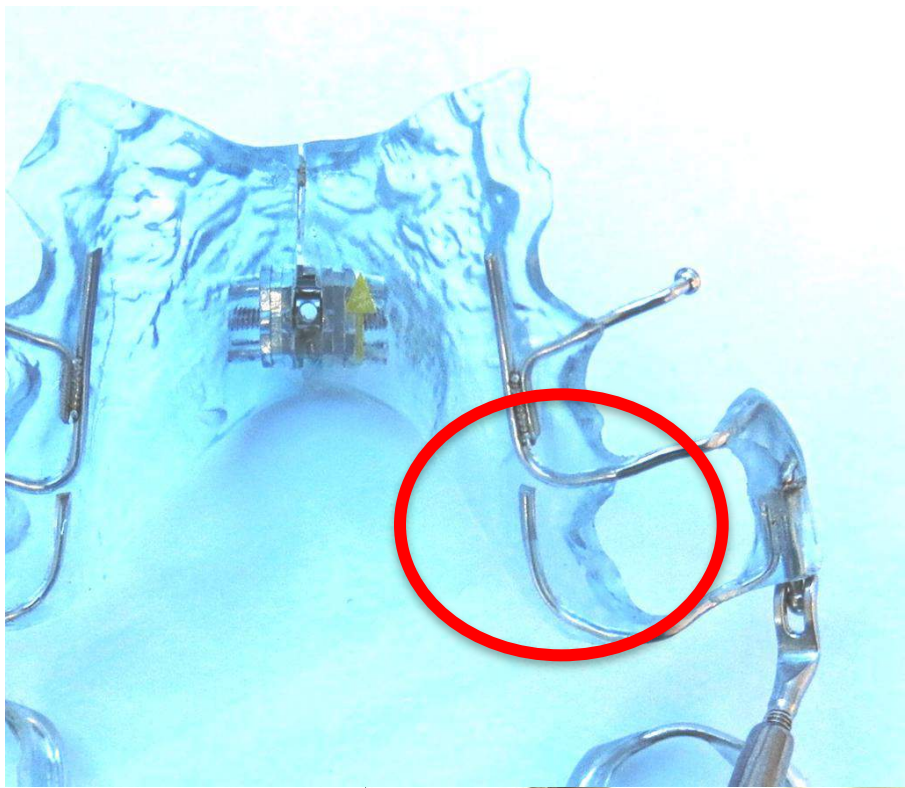
Retention W PUL



Mistake : Insufficient protraction. First premolars and canines must be in Class I.

QUIZZ: Find the mistake (The answer is on the next slide)



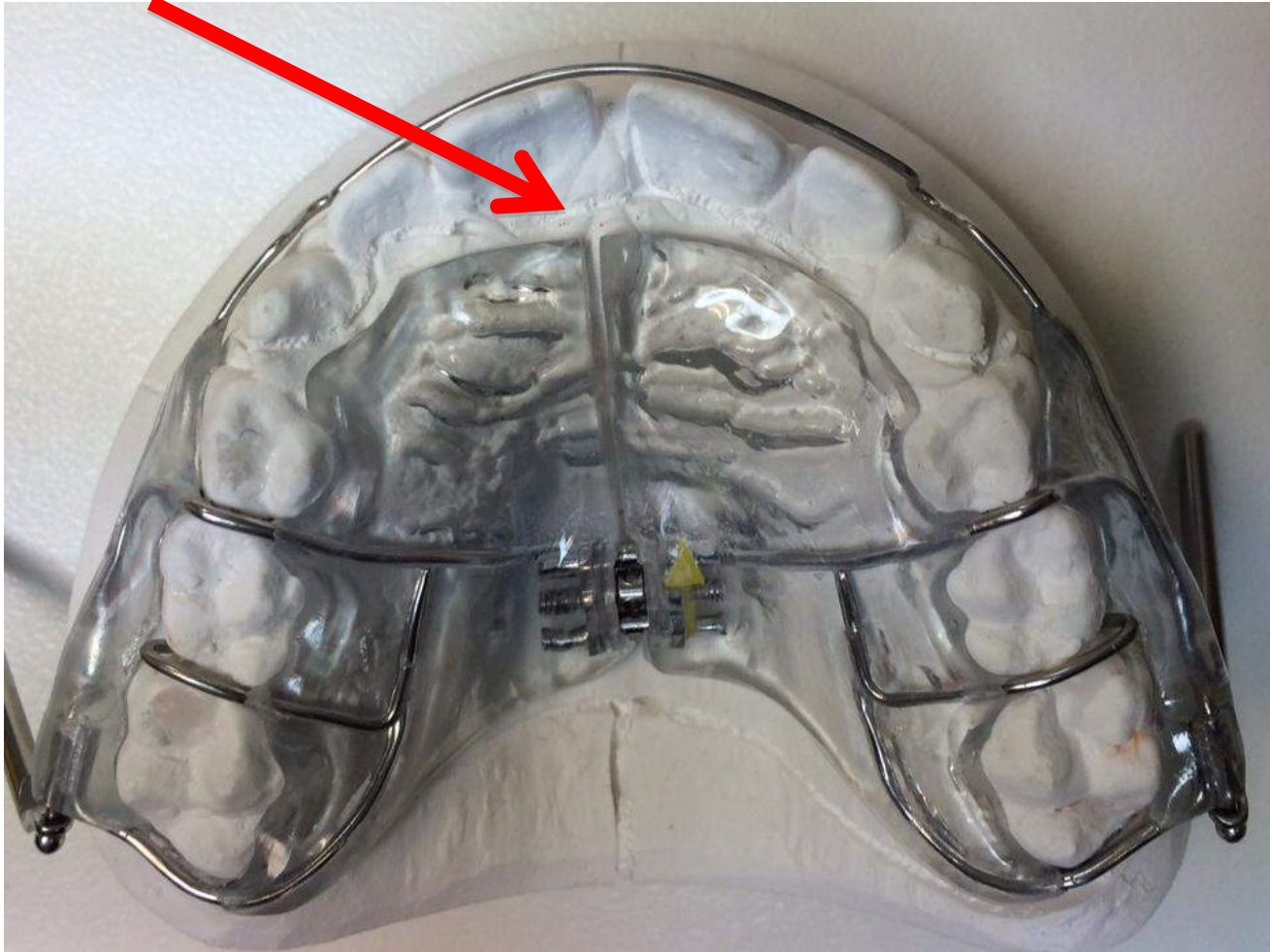


Too long framework.
Recommended soldering

QUIZZ: Find the mistake (The answer is on the next slide)



In cases that have a resin labial band in the anterior upper teeth the resin must give support to the lingual side of the incisors in order to avoid lingual tipping and prevent anterior cross bite.

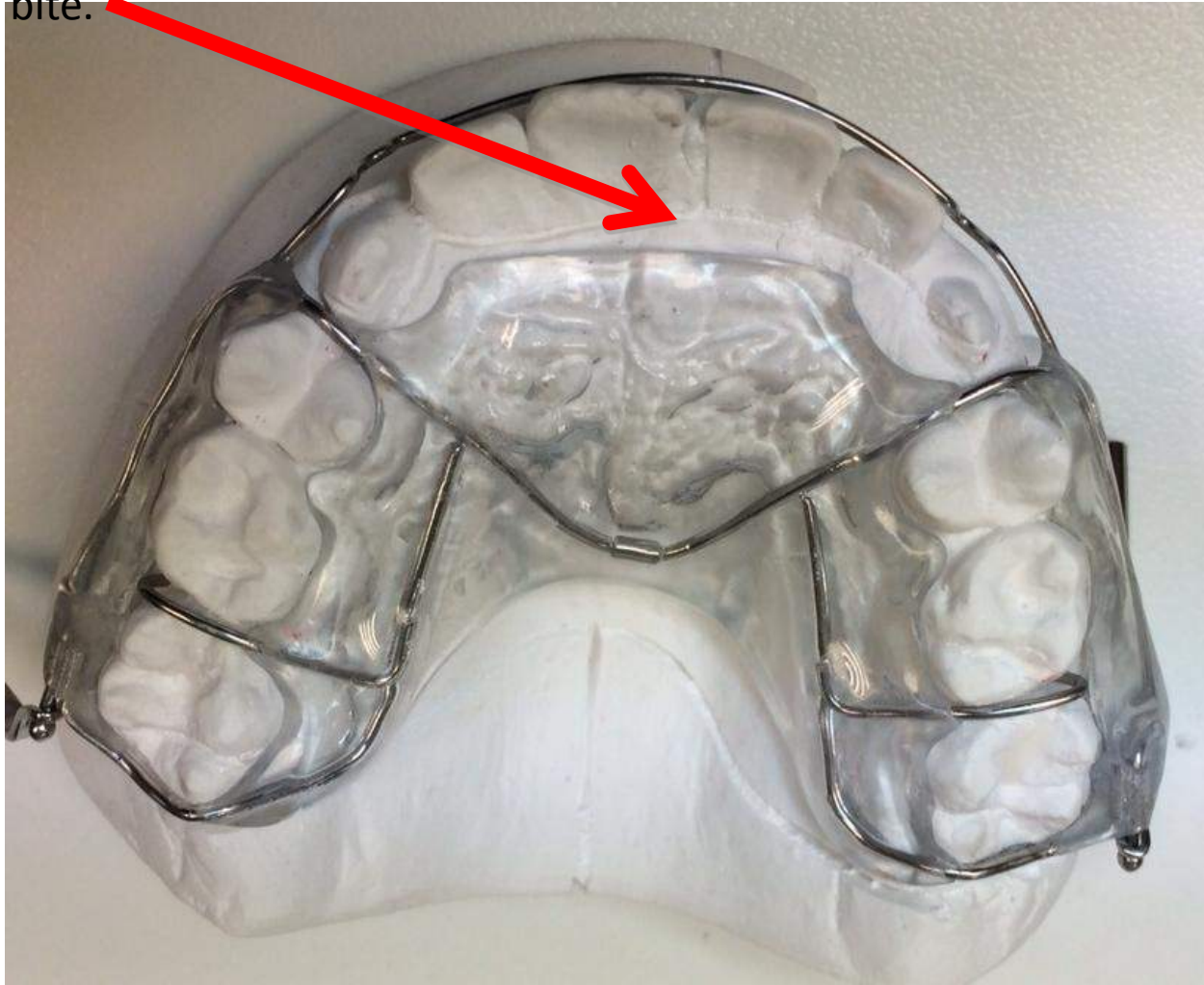


Note: When the orthodontist prescribes a labial arch in the maxilla, he does it in order to have maxillary anchorage and in order to move the lower incisors labially: classic activator effect.

QUIZZ: Find the mistake (The answer is on the next slide)



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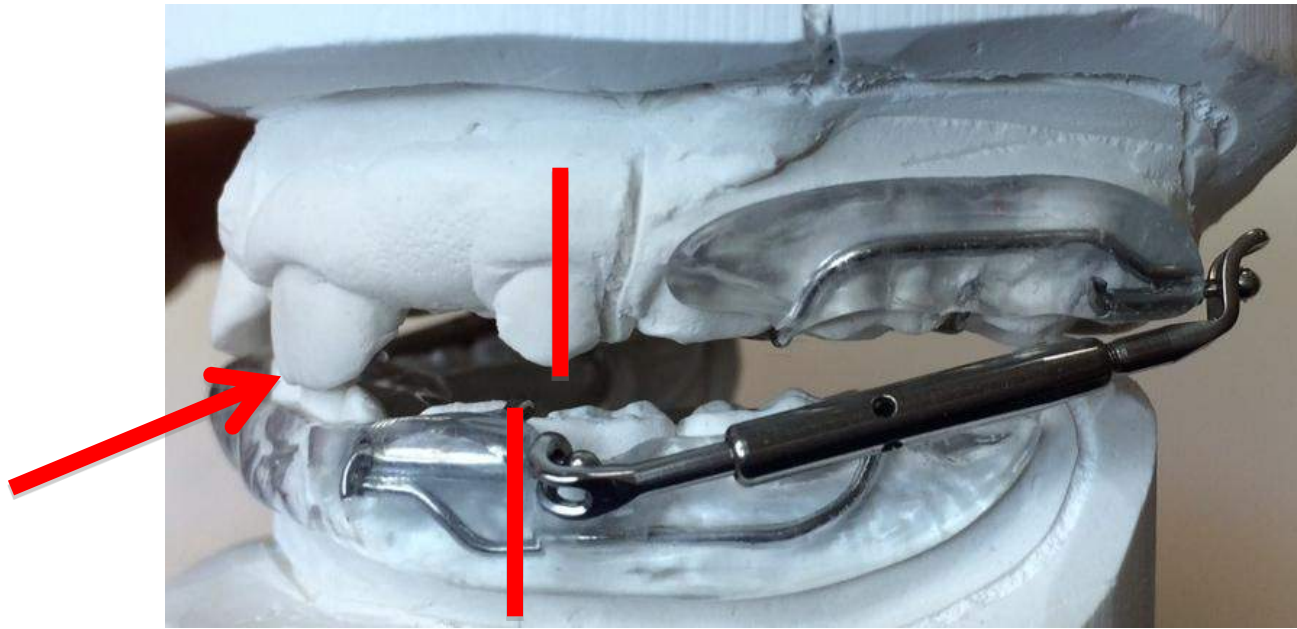




The Coffin spring must be closer to the palate, 2 mm away.

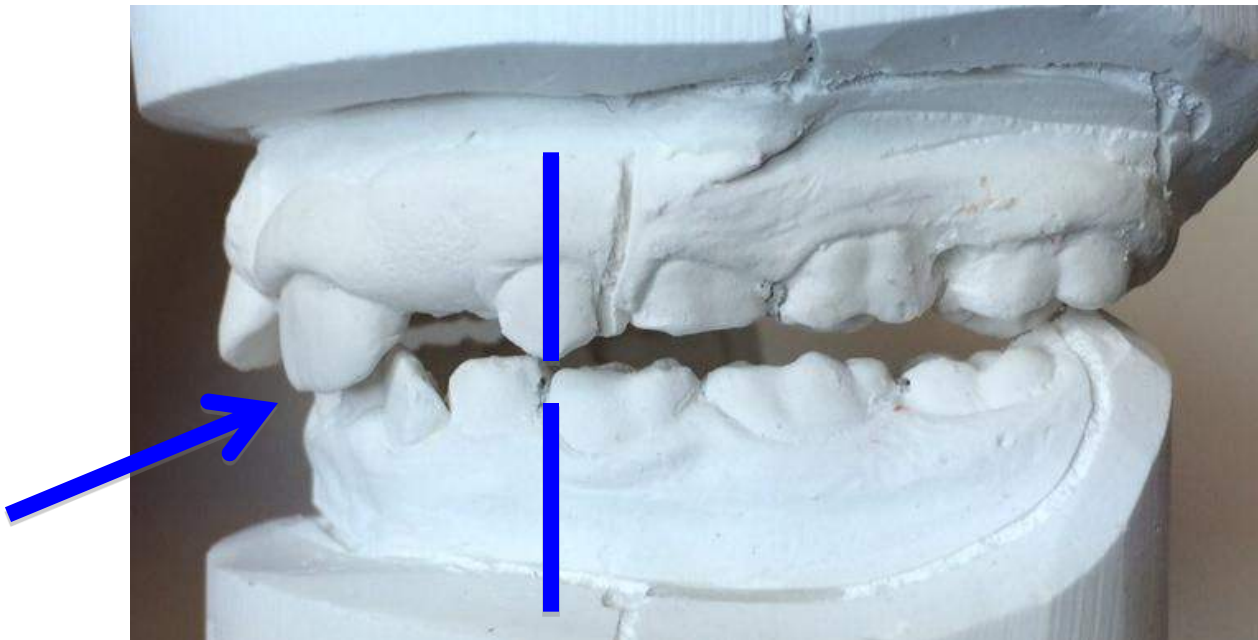
QUIZZ: Find the mistake (The answer is on the next slide)





The system has
excessive protraction.

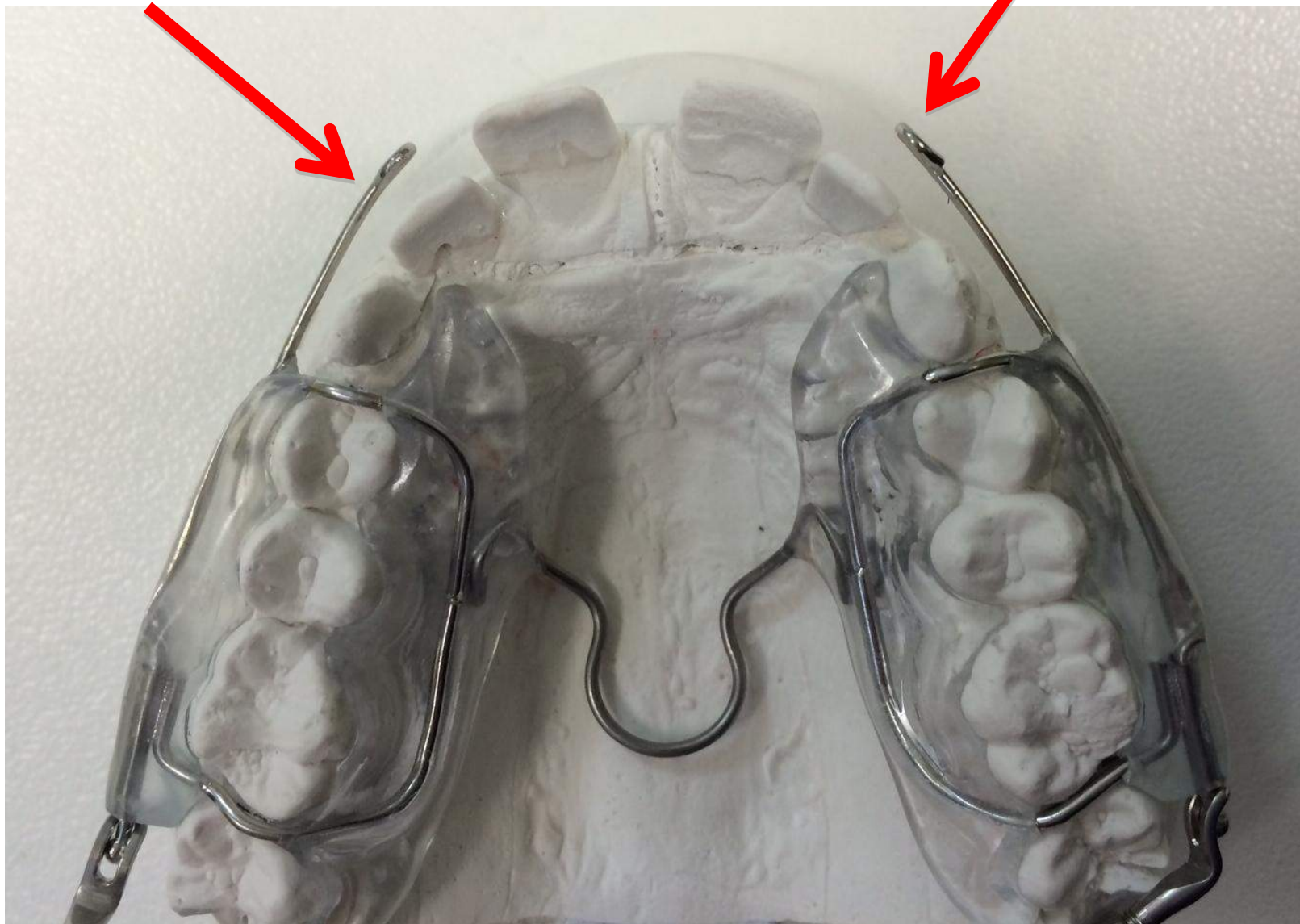
Patient discomfort



QUIZZ: Find the mistake (The answer is on the next slide)



The hooks are too far away from the teeth, they must be closer.



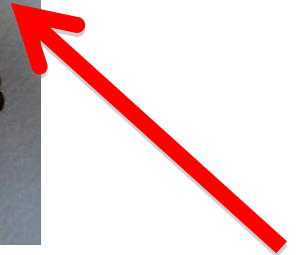
QUIZZ: Find the mistake (The answer is on the next slide)



CORRECT



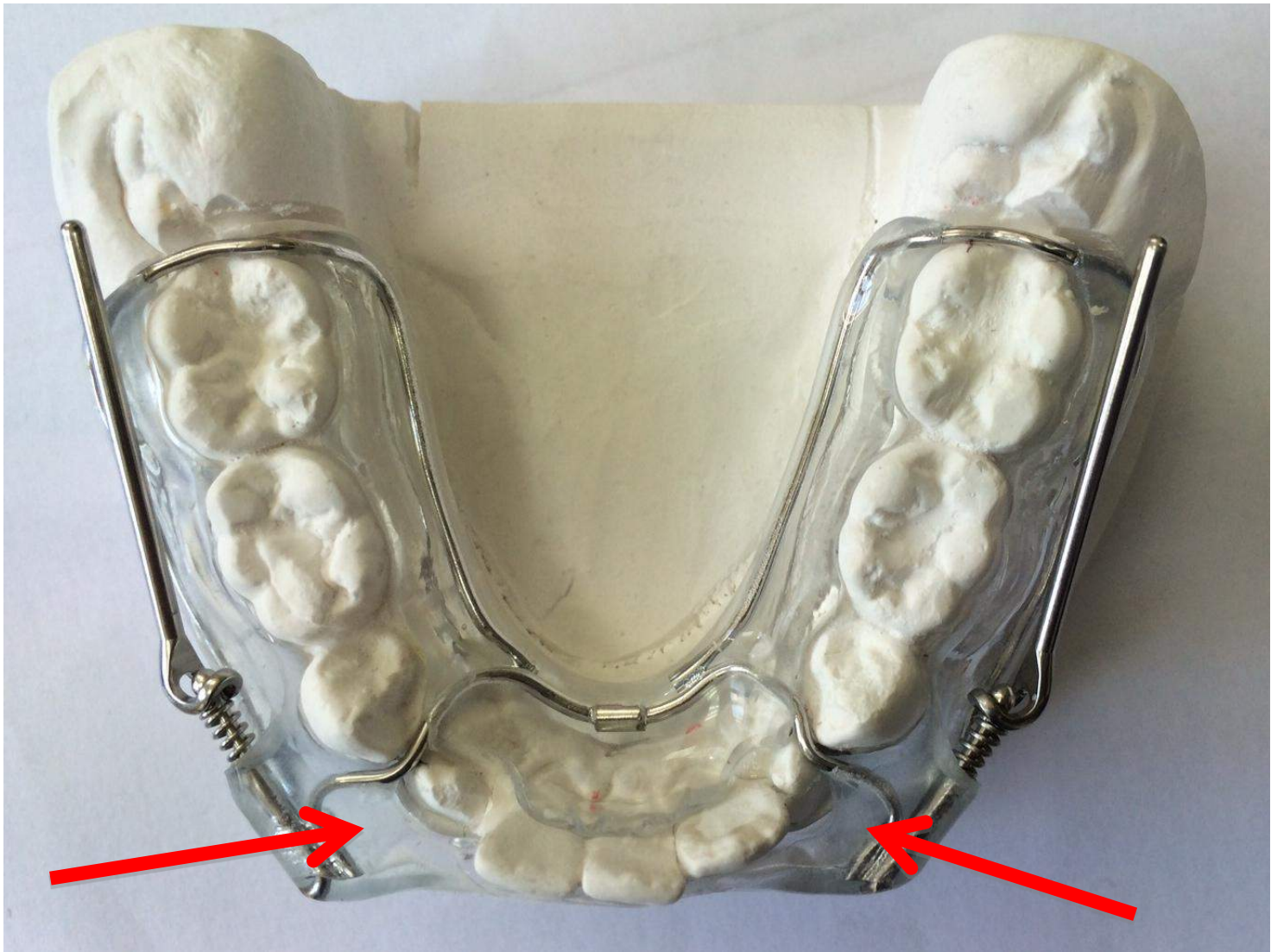
INCORRECT



The framework is too far away from the molar= patient discomfort and lesions

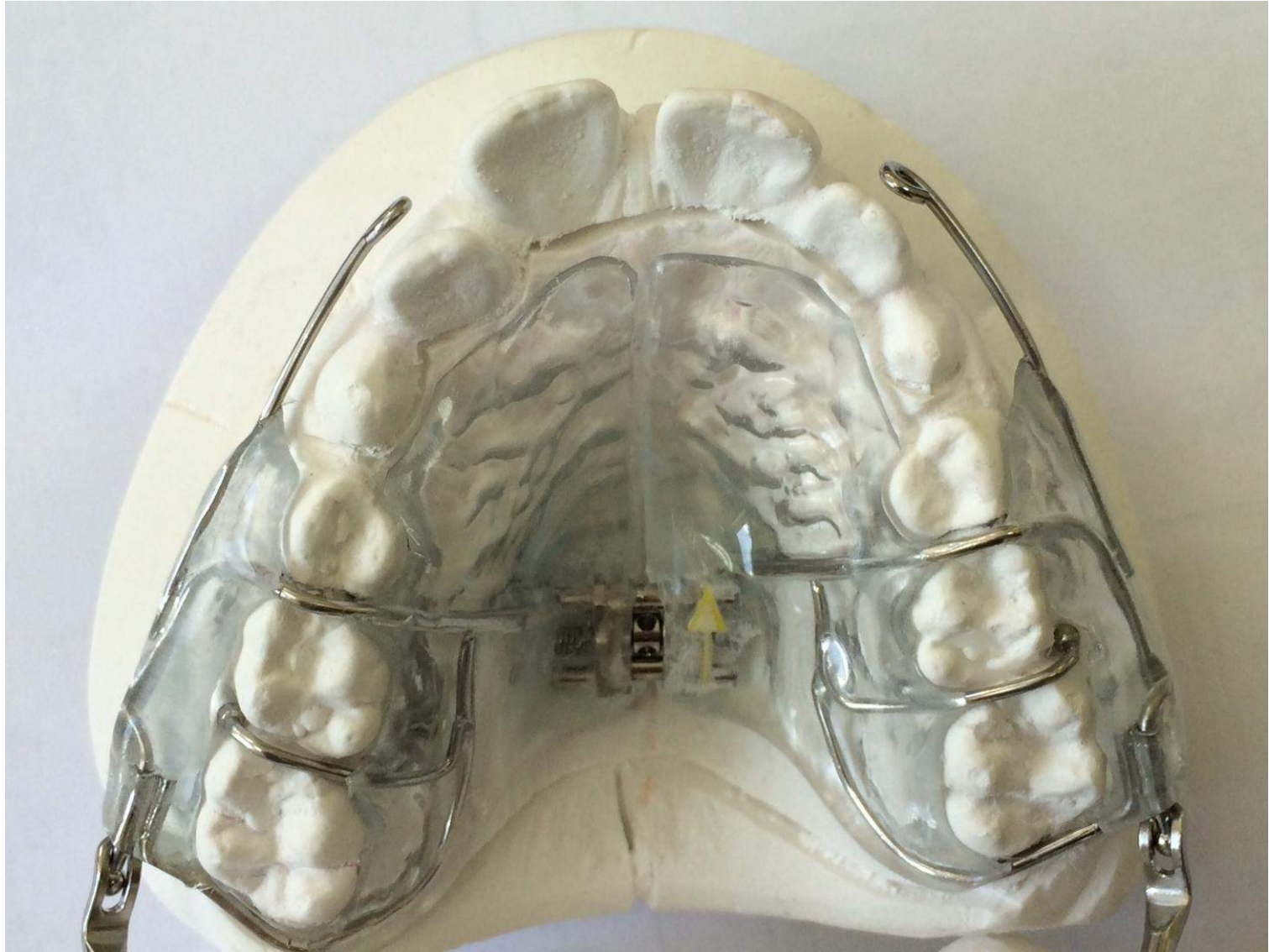
QUIZZ: Find the mistake (The answer is on the next slide)





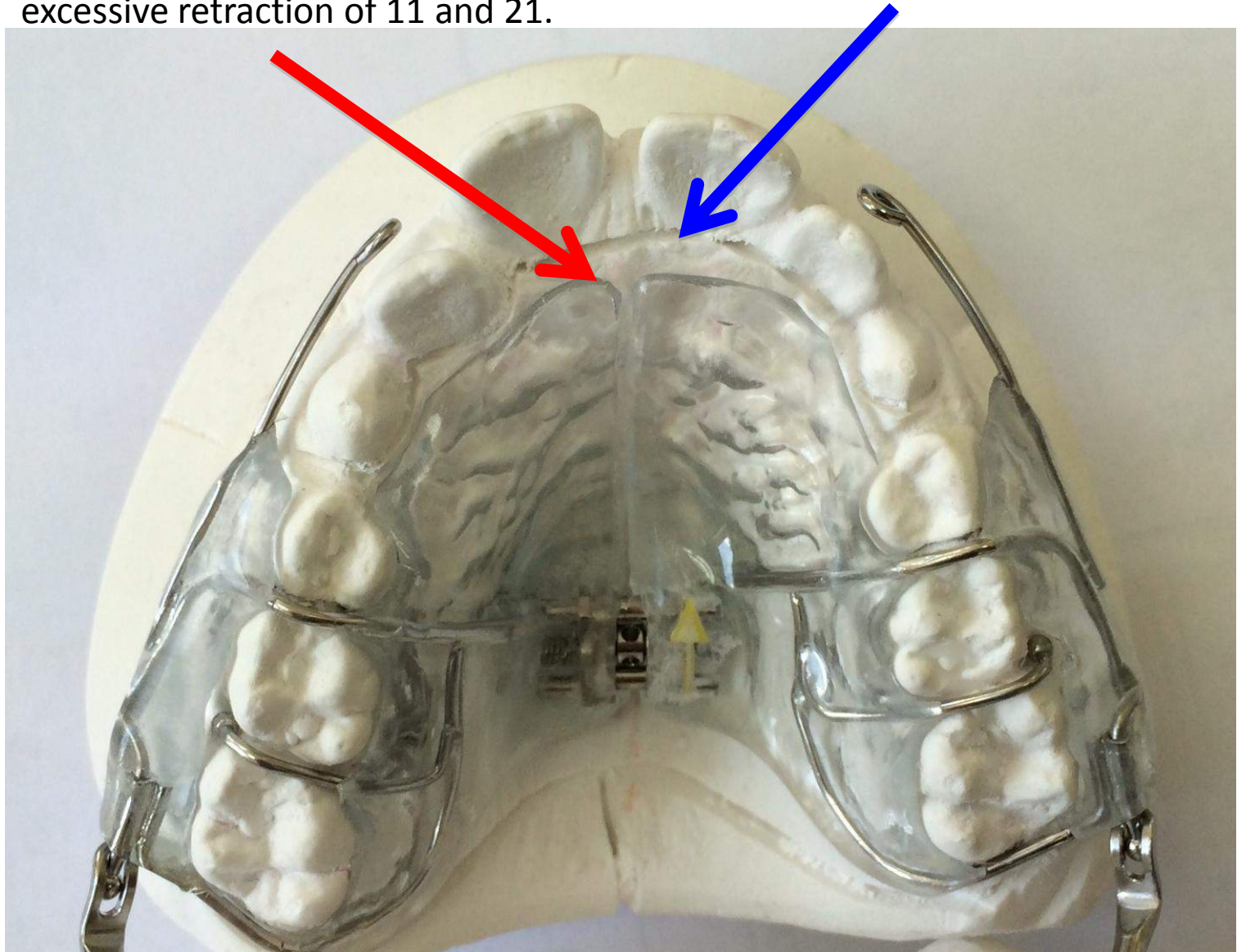
The framework and the tube are too far away from the teeth, which will cause an unaesthetic bulging of the lower lip.

QUIZZ: Find the mistake (The answer is on the next slide)



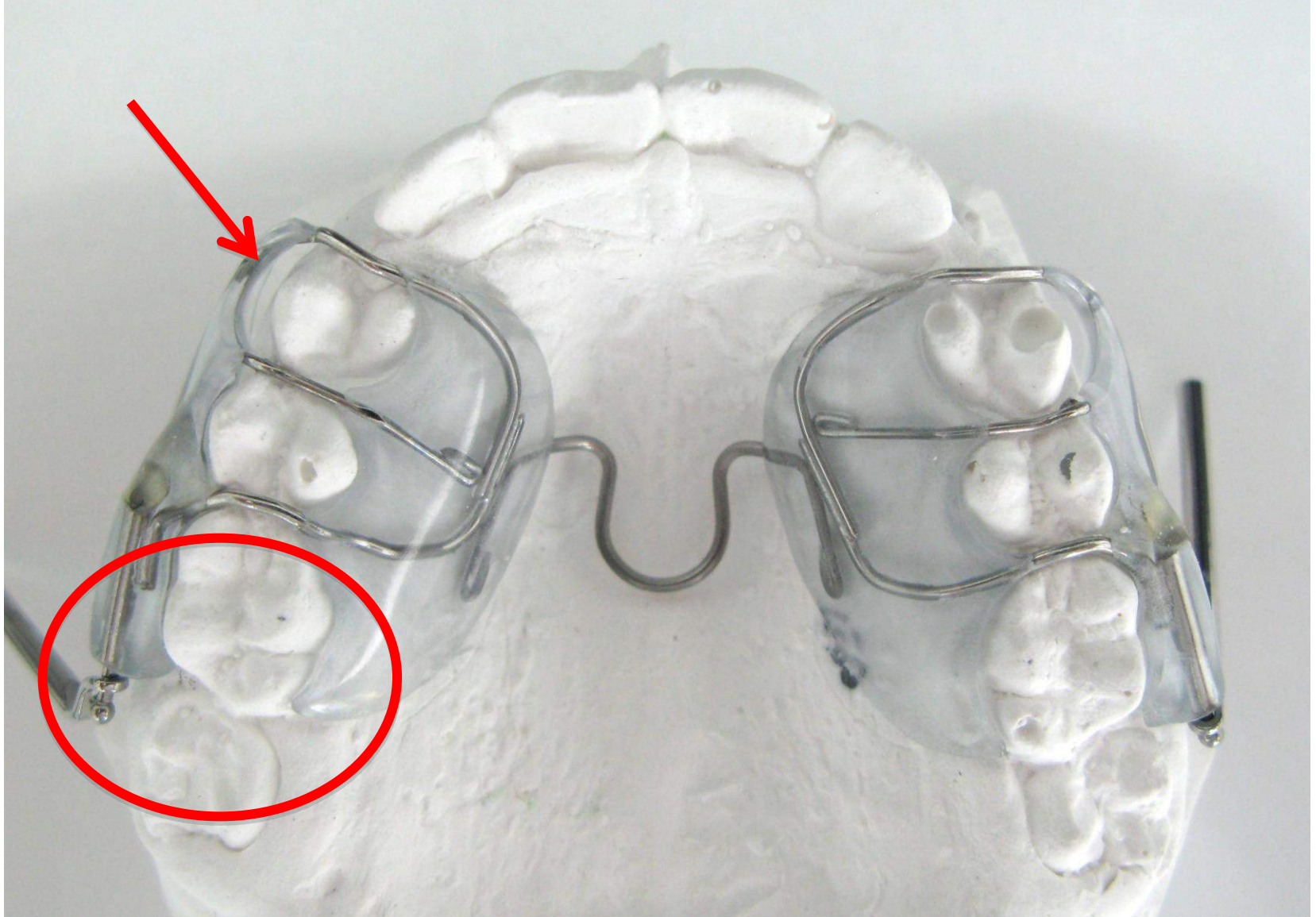
The resin behind the incisor has been excessively ground down: red arrow

It should have been left at the level of the blue arrow in order to avoid excessive retraction of 11 and 21.



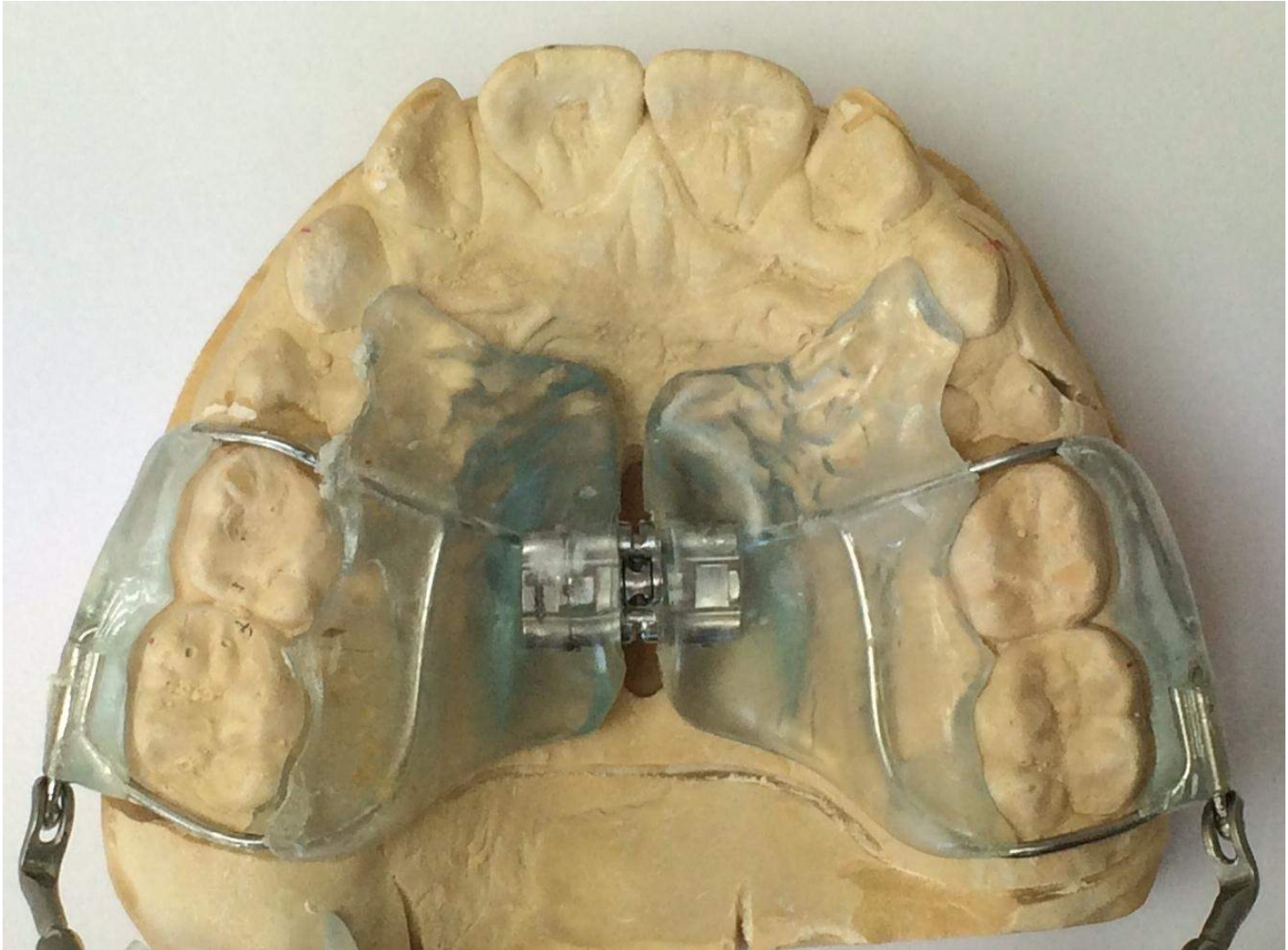
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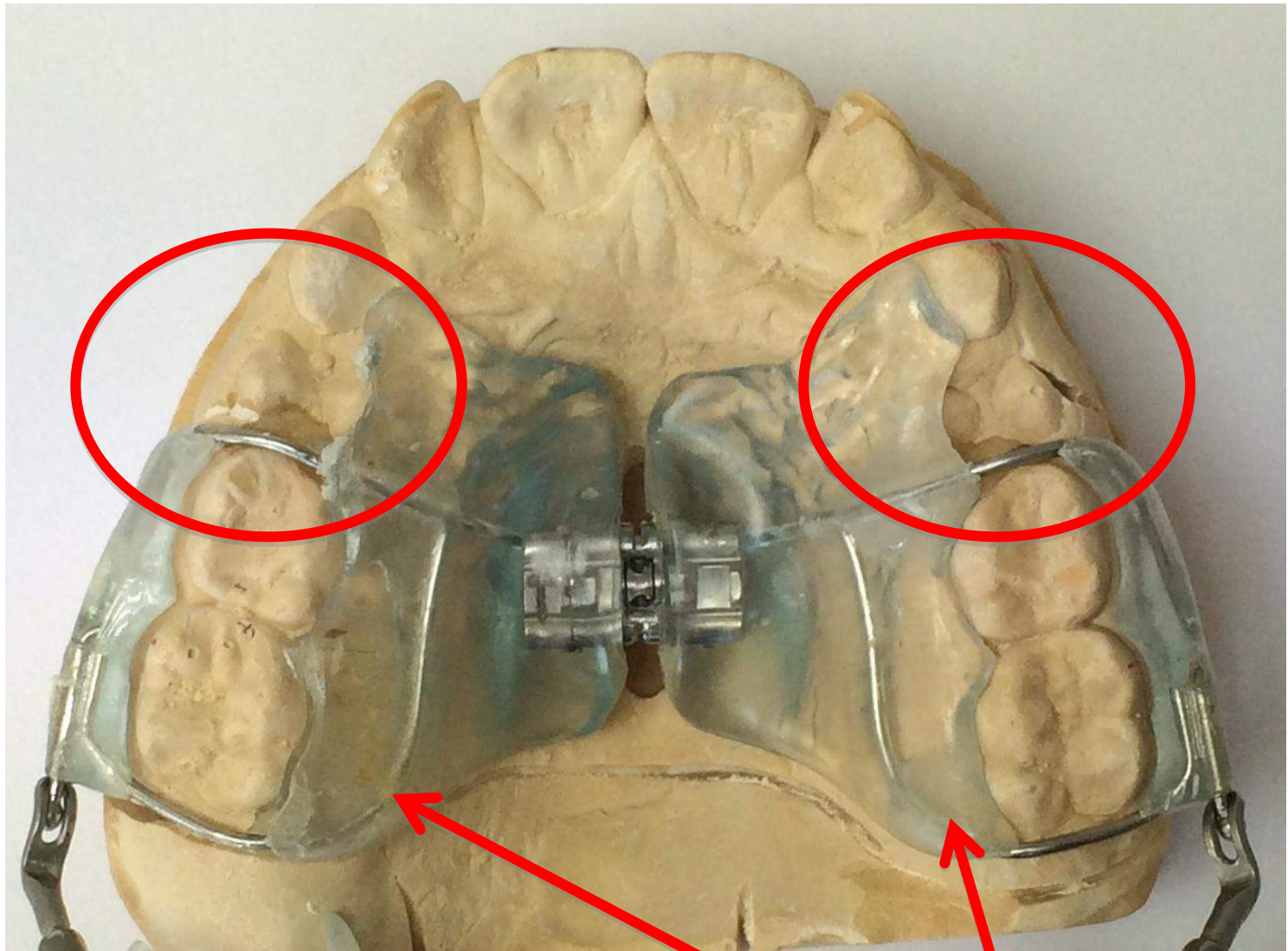




The orthodontist has requested: Framework in front of the 6 and ball hook between the 4 and the 5 to enable bonding brackets from 14 to 24 and open spaces for canines with NiTi coils.

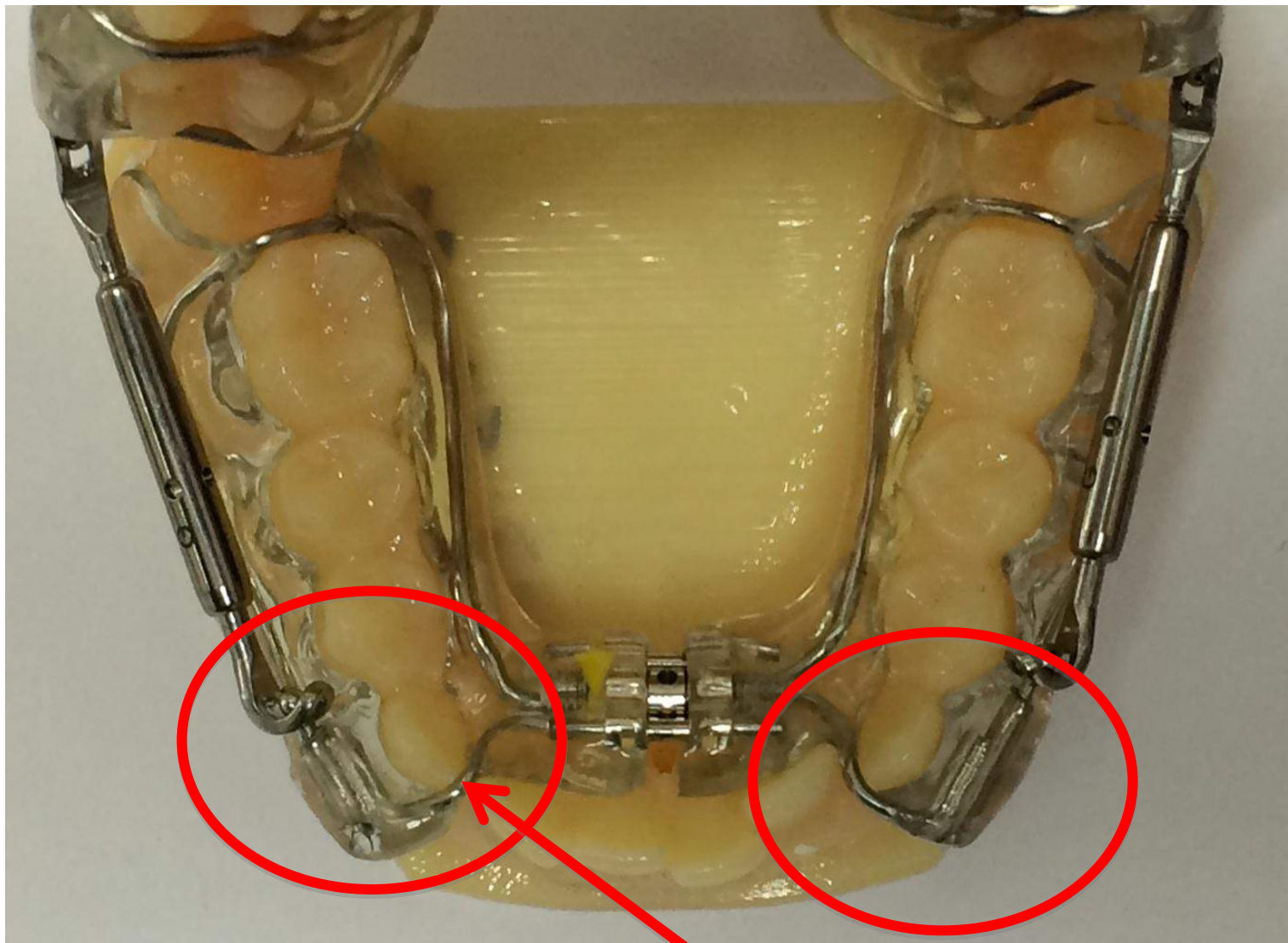
QUIZZ: Find the mistake (The answer is on the next slide)





Anticipate the development of 14 and 24 grinding down the lingual resin in order to leave space.

Consequence: the orthodontist has not ground down the resin, the patient has been wearing the appliance unstable, and a few weeks later the resin has fractured.



The framework needs to pass distal to the lower permanent canine, and not mesial.

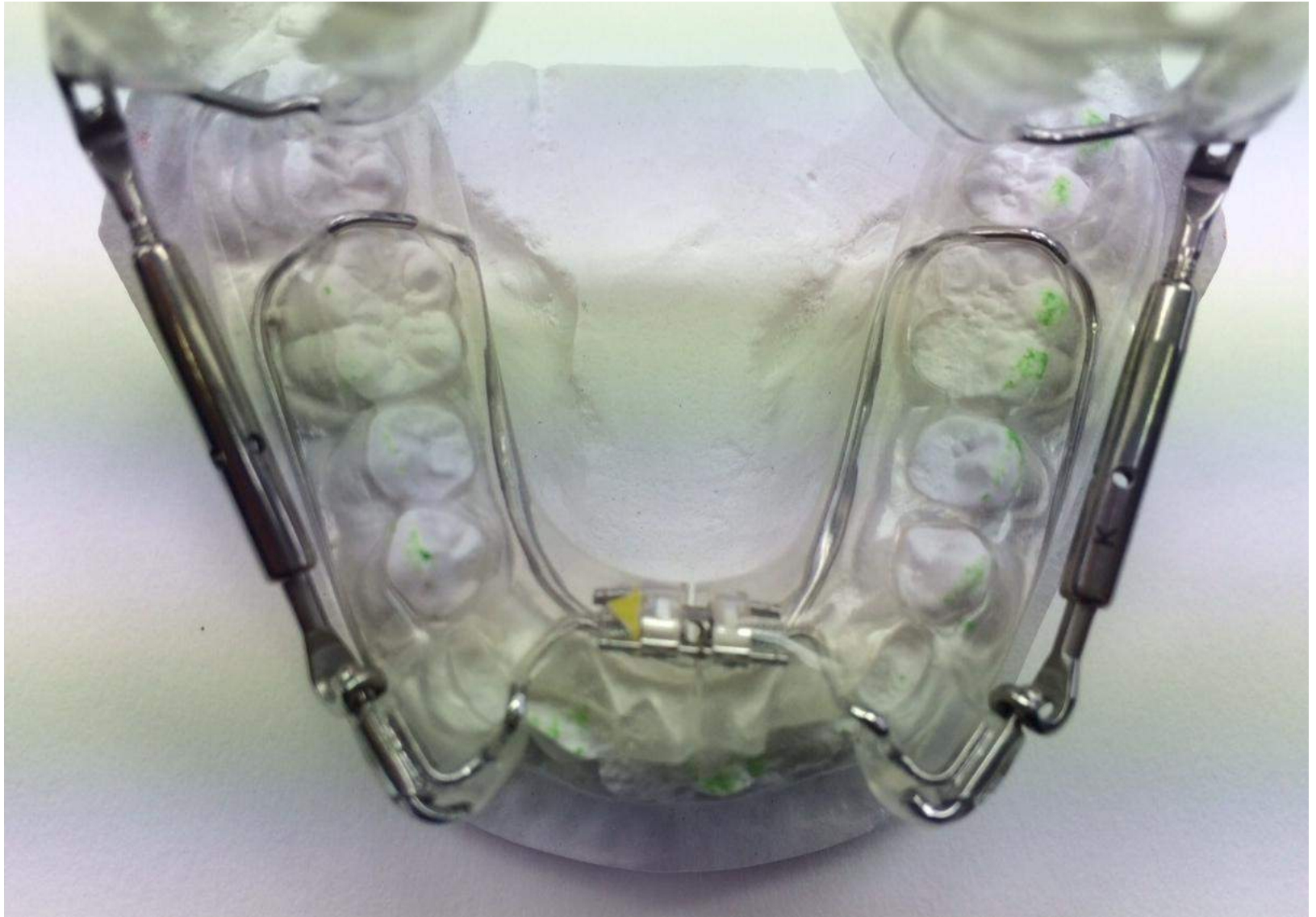
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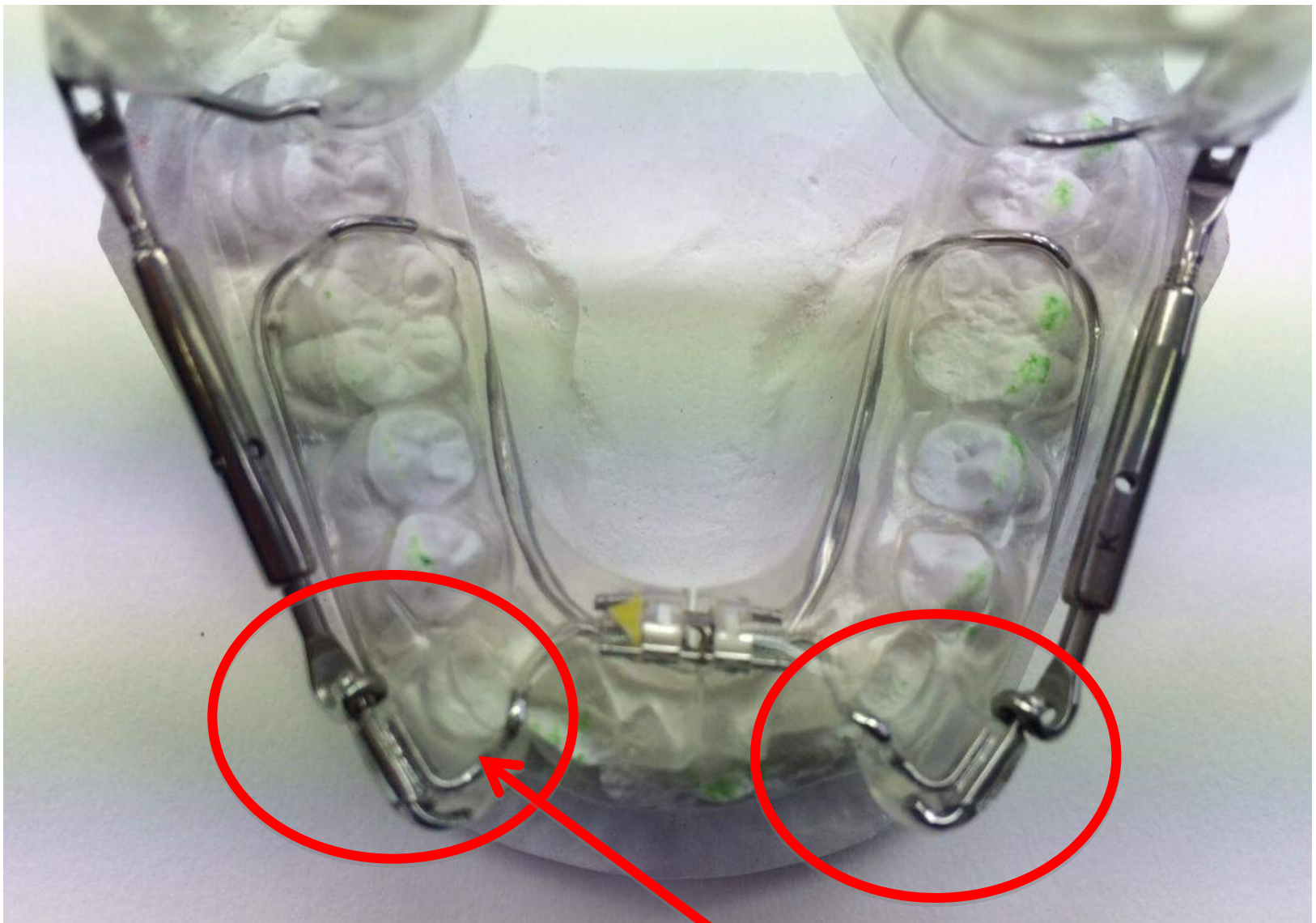




The Coffin spring needs to be closer to the palate: only 2mm away for patient comfort.

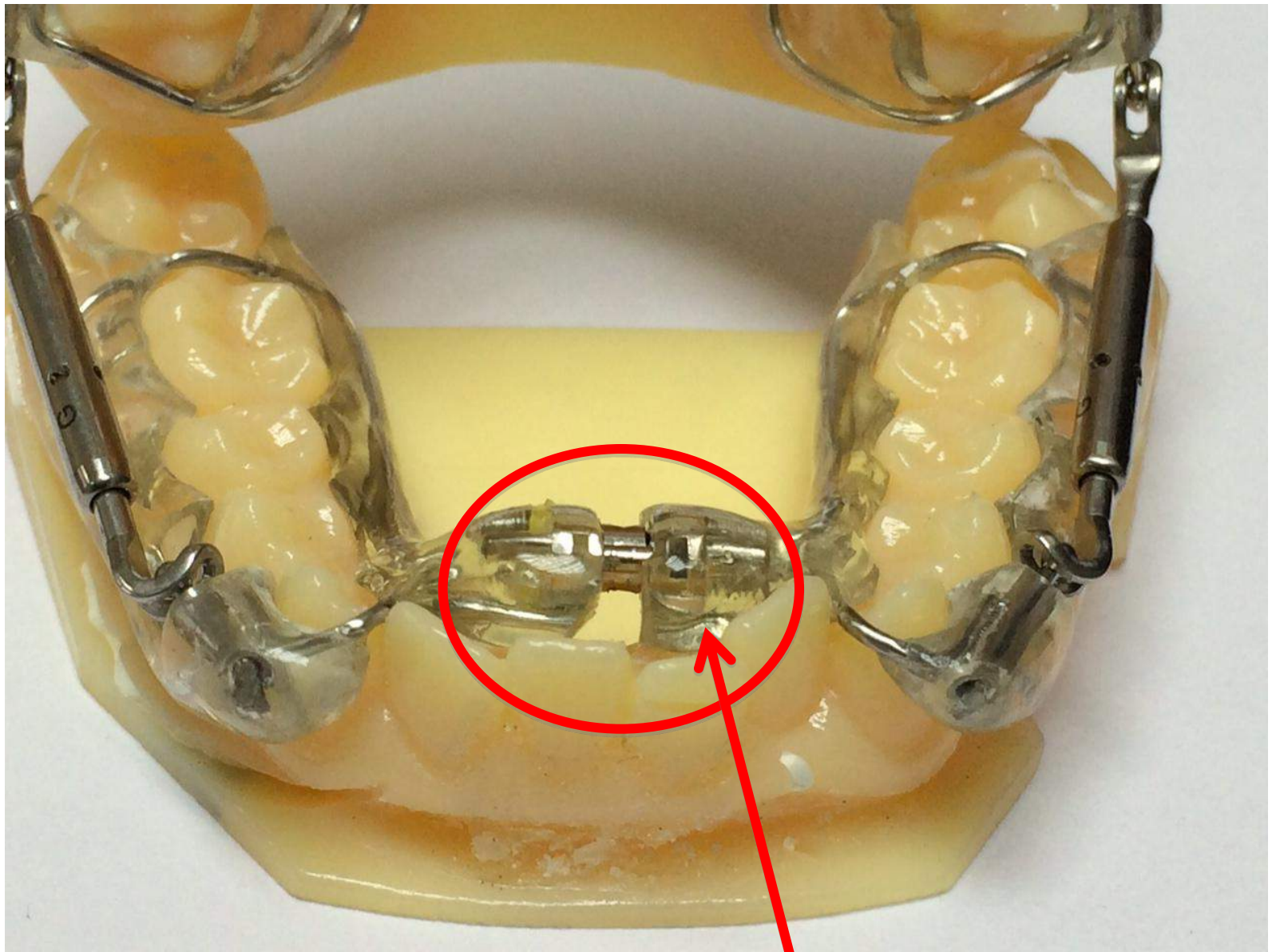
QUIZZ: Find the mistake (The answer is on the next slide)





The framework needs to pass distal to the lower permanent canine and not mesial.





The screw protrudes excessively: a mini-screw should be used, closer to the gingiva for patient comfort.

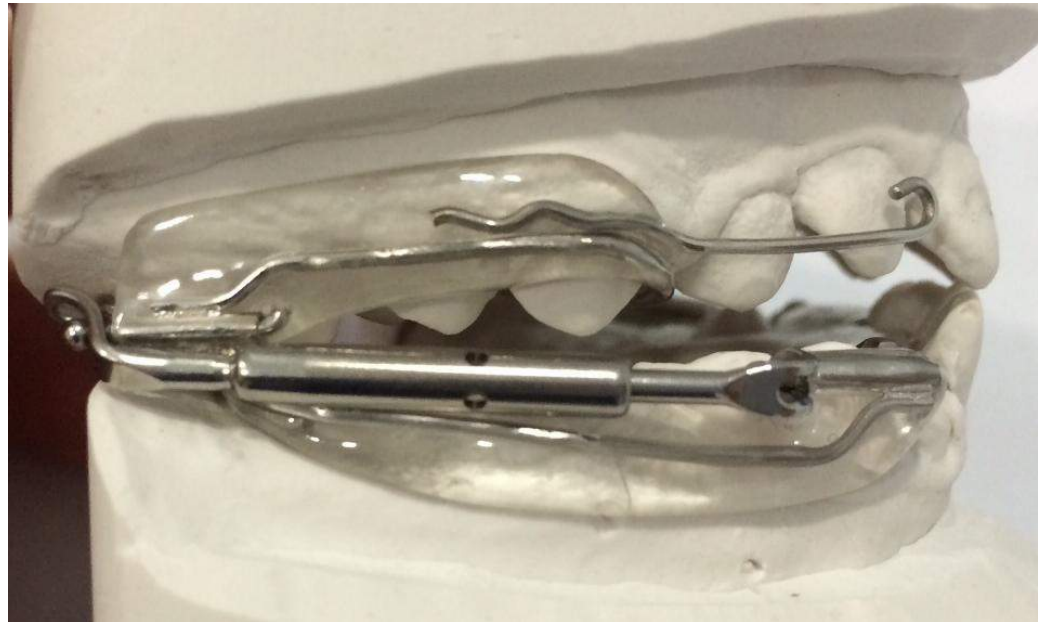
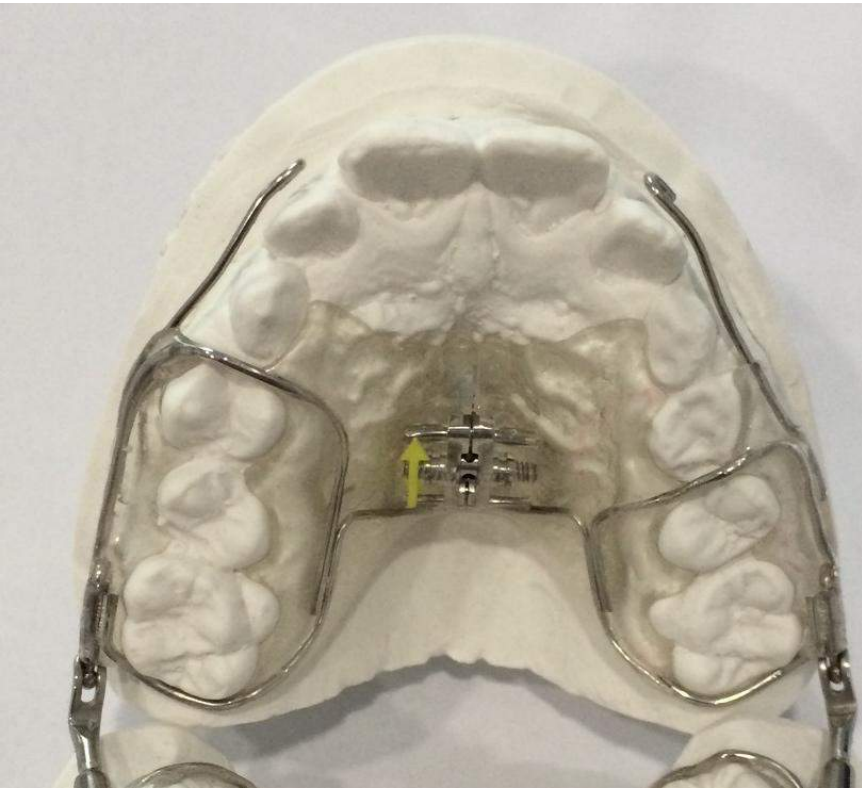
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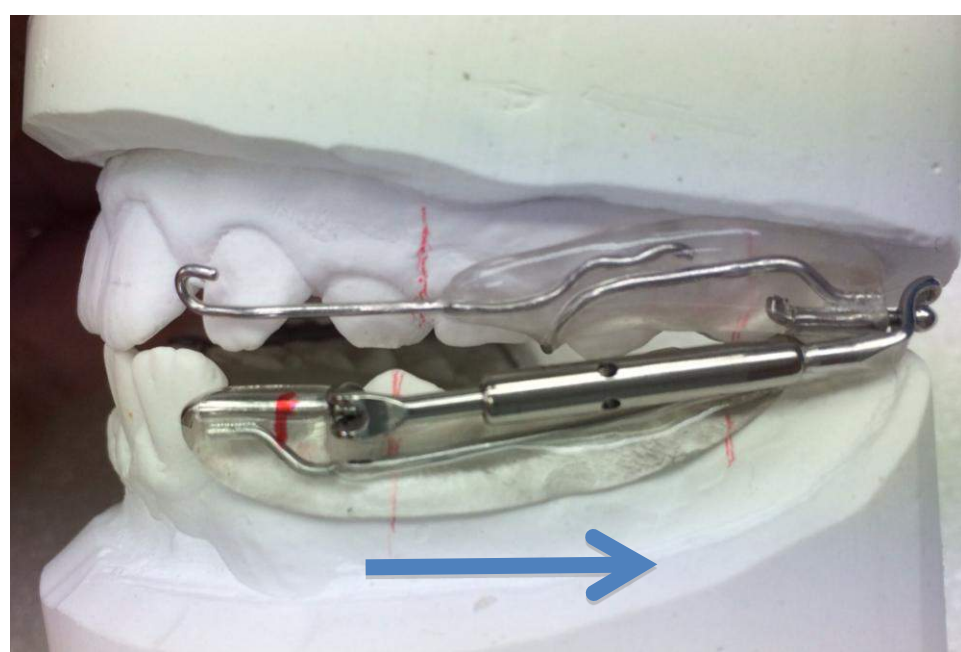
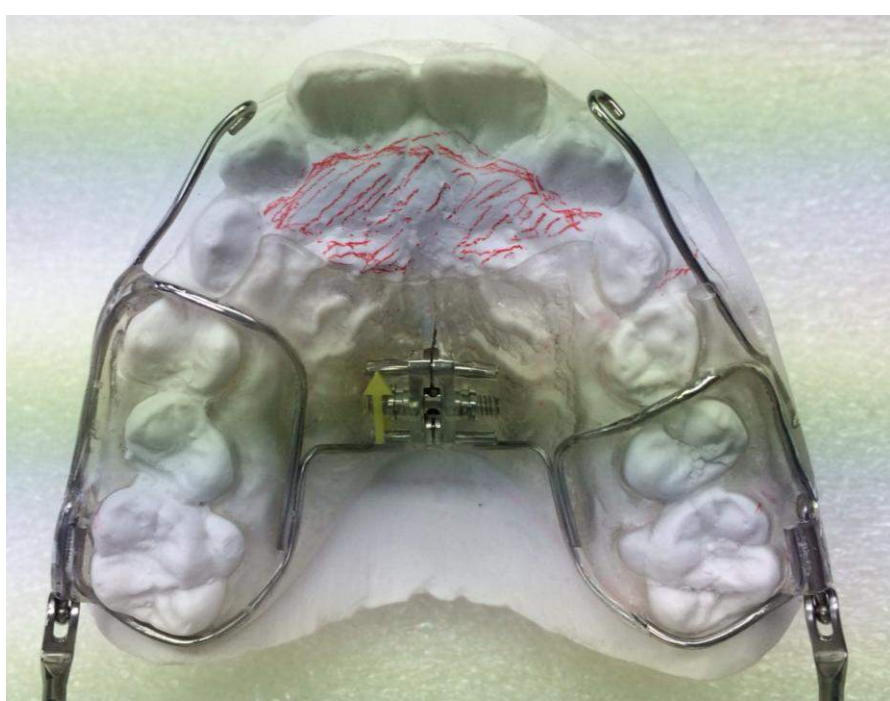




The framework needs to pass distal to 33 and 43 in order to be able to activate the labial arch and upright the incisors and close the spaces.

QUIZZ: Find the mistake (The answer is on the next slide)





The resin must get to the incisors, and the protraction is very important. Avoid the risk of anterior cross bites.

The length of the mandibular tube (red mark) needs to be shorter, or a small size system should be used.



Tips:

-You can download the catalogue and the prescription guide from www.pulconcept.com

- You can keep your technical skills updated in the following ways:

E-learning: online registration in the web (free of charge with the Starter Kit)

And/or

Signing up for a refresher course with Mr. Jean-Charles Morin at the Pulconcept lab.

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To our partner labs:

The success of your treatments is quality-dependent:
training and material really do matter.

It will be easier to train and provide practical advice to the
professionals involved if their PULs are of the same quality
as those we use in our clinical training sessions.

Best wishes

Dr Callabe