




# Socket Preservation

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**UK IMPLANTOLOGY YEAR COURSE**  
Module 3


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## Aims & Objectives

- What is meant by 'socket preservation'?
- Why do we need to do it?
- Does it work?
- How do we do it?







## What is 'Socket Preservation'?

**Definition :**



....a procedure in which a graft material or scaffold is placed into the socket of an extracted tooth at the time of extraction to preserve the alveolar ridge.






## Why do we need to do it?

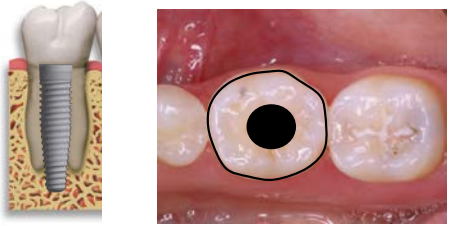

**Option 1 – immediate implant :**







## Why do we need to do it?

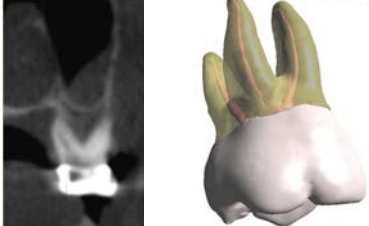

**When an immediate is not possible – lower molars**



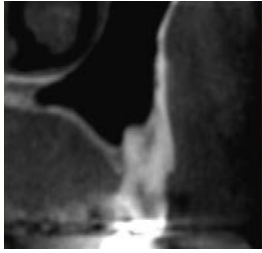
## Why do we need to do it?

**When an immediate is not possible – upper molars**

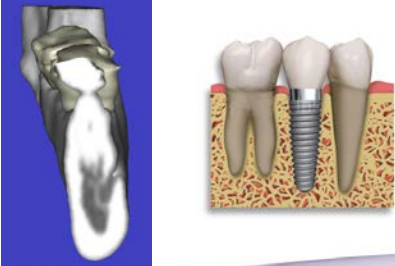
Why do we need to do it?

When an immediate is not possible – other teeth



Why do we need to do it?

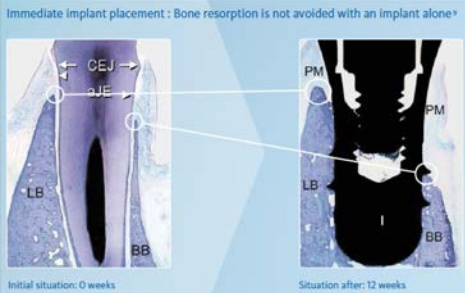
When an immediate is not possible – other teeth



Why do we need to do it?

When an immediate is not possible – thin cortex

Immediate implant placement: Bone resorption is not avoided with an implant alone\*



Initial situation: 0 weeks

Situation after: 12 weeks


Why do we need to do it?

When an immediate is not possible – other teeth

An immediate implant needs BONE

Why do we need to do it?

Other reasons for socket preservation – bridgework



Why do we need to do it?

After an extraction – natural healing



Why do we need to do it?

**After an extraction – augmented healing**

Why do we need to do it?

**After an extraction – bone shrinkage**

Does it work?

How to do it...

**The problem – covering the GBR material**

How to do it...


**The problem – covering the GBR material?**

How to do it...

**The problem – extension & primary flap closure?**

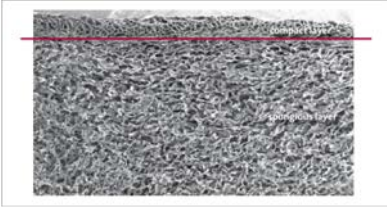
How to do it...

**The solutions – Mucograft Seal**



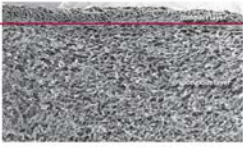
How to do it...

**The solution – Mucograft Seal**



How to do it...

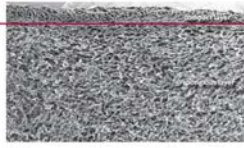
**Mucograft Seal – compact layer**



- Tightly packed fibres
- Strengthens matrix
- Protects against bacterial ingress
- Allows secure suturing
- Placed outermost

How to do it...

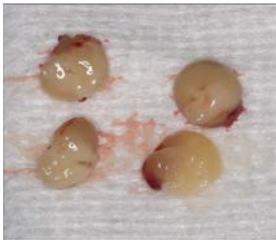
**Mucograft Seal – spongy layer**



- Lightly packed fibres
- Thick layer
- Placed against GBR material
- High porosity
- Facilitates fibroblast ingrowth

How to do it...

**The solutions – PRF**




How to do it...

**The solutions – PRF**




How to do it...

**The solutions** – PRF (+ 1 week)



How to do it...

**The solutions** – PRF (+ 1 month)





How to do it...

**The solutions** – PRF (+ 1 month)





How to do it...

**Step 1** – minimally traumatic extraction: periostomes



How to do it...

**Step 1** – minimally traumatic extraction: piezosurgery



How to do it...


**Step 1** – minimally traumatic extraction: luxators





How to do it...

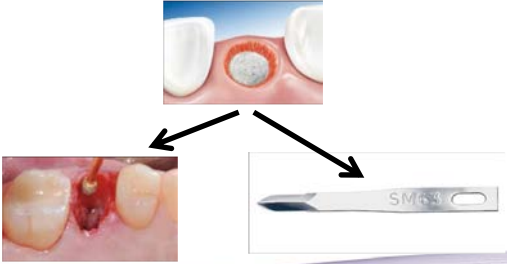
**Step 2 – gently curette the socket with Lucas curette**



The slide shows a clinical photograph of a tooth socket being treated with a Lucas curette. To the right is a separate image of the Lucas curette instrument, which is a long, curved metal tool with a sharp, hook-like tip.

How to do it...

**Step 3 – de-epithelialise the marginal mucosa**



The slide features a diagram at the top showing a cross-section of a tooth socket with arrows pointing to the marginal mucosa. Below the diagram is a clinical photograph showing the de-epithelialisation process. To the right is an image of a scalpel with 'SM 55' written on it.

How to do it...

**Step 4 – place the GBR material**



The slide shows a clinical photograph of a tooth socket where a white, granular GBR material is being placed into the defect using a surgical instrument.

How to do it...


**Step 4 – place the GBR material**



The slide displays the product packaging for Geistlich Bio-Oss Collagen on the left and a clinical photograph on the right showing the white GBR material being placed into the socket.

How to do it...


**Step 4 – place the GBR material**



The slide features an advertisement for Geistlich Bio-Oss Pen. The ad includes the text: 'Nothing changed. Just improved.', 'Geistlich Bio-Oss Pen', 'No. 1 bone substitute\*', 'Clean handling', 'Optimal access to the defect', 'Simple to use', 'Very good consistency', 'Comfortable to use', 'Gives time', and 'Easy maintenance'. It also lists 'NEW!' and 'Larger size' with checkmarks. The bottom right corner of the ad has the number '35' and the text 'LEADING REGENERATION'.

How to do it...

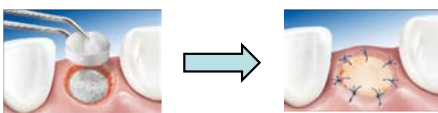
**Step 5 – place the GBR material**



The slide shows a clinical photograph of a tooth socket with the GBR material fully placed and covered by a red surgical dressing.

How to do it...


**Step 6 – place the Mucograft Seal**



The diagram illustrates the process of placing a mucograft seal. On the left, a dental preparation is shown with a circular seal being applied to the gingival margin. An arrow points to the right, where the seal is fully seated and secured with sutures around the perimeter of the preparation.

How to do it...


**Step 6 – interrupted sutures with 6/0 Prolene**



This block shows the materials and clinical application for Step 6. On the left is a package of 6-0 Prolene suture, labeled '6-0 PROLENE P1811'. On the right is a clinical photograph showing the tooth preparation from the previous slide, now closed with several interrupted sutures made with the 6/0 Prolene suture.

How to do it...

**Step 7 – postoperative stages**



Two clinical photographs illustrate the postoperative stages. The top photo shows the tooth preparation with sutures in place, accompanied by the text 'Remove sutures after 4 weeks'. The bottom photo shows the same tooth preparation after 4-6 months, with the text 'Mature tissues at 4-6 months', indicating the final stage of tissue maturation.

**THE END**