Nowadays in regenerative therapy most of the time resorbable membranes are used. They can be classified in two groups: Synthetic and Collagen membranes. The advantage of these membranes is that they do not require a second surgery for removal. The procedure is therefore less invasive for the patients and shortens therapeutic times. Complications are minimal in the event of premature exposure when compared with non-resorbable membranes. Because it is not possible to determine membrane resorption rate with accuracy, there is a high risk that the membrane breakdown time will not match with the regeneration time. Furthermore, during the membrane breakdown process, the metabolic bioproducts can give rise to local inflammatory reactions.

A 35 five years old male presented with deep probing depth, bleeding on probing and a stable n.33. A regenerative approach was selected, and heterologous bone tissue graft and a collagen membrane were chosen.
Fig. 1  Img. 1 – Preoperative radiograph and probing distal to 32, mesial to 33, mesial to 43, and distal to 42 shows that the defect involves 33 and 42.

Fig. 2  Img. 2 – Intraoperative probing of 33: defect after removal of granulation tissue. Note the irregular mesial appearance of the root surface of 33.
Fig. 3  Img. 3 – Filling of the defect with heterologous bone.

Fig. 4  Img. 4 – Positioning of a collagen membrane.
Fig. 5  Img. 5 – Positioning of connective tissue over the membrane and sutures.

Fig. 6  Img. 6 – Clinical comparison before surgery state and after 2 years.
Successful long term results can be achieved with resorbable membranes even in very advanced cases of bone loss.