

## FP79

### **Bone osteosynthesis in cranioplastic surgery with resorbable plates on the endocranial surface of the cranial bone**

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**Introduction:** Premature ossification of coronal and metopic sutures is treated by fronto-orbital remodelling. Such operations require fixation of the reshaped cranial bones. The leading role in skull bone osteosynthesis have taken biodegradable plating systems, which provide enough stability for the period of time that takes the osteotomies to ossify. Plates that are placed in a traditional way on the outer surface of the bone usually could be palpated through the skin, sometimes for long periods, thus compromising cosmetical results of the operations. Better aesthesis could be achieved by placing the plates endocranially.

**Methods:** We report use of poly(lactide-co-glycolide) (PLGA) resorbable plating system on the inner aspect of frontal bone in 27 patients operated due to anterior plagiocephaly and trigonocephaly. The outcome was evaluated at follow-up visits. The mean follow-up was 3.9 years.

**Results:** Three patients had complications that required reoperations (malposition of bone fragments, postoperative subcutaneous CSF collection and minor skin necrosis). All of these complications were not related to endocranial location of the plates. No other significant complications occurred; neither there were problems with ossification. All but one patient's outcome was judged as good or excellent.

**Conclusions:** Placement of PLGA plating systems on the inner surface of the calvarial bones is safe and stable technique that provides good cosmetic results.