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### *Surgical management of Obstructive Sleep Apnea (OSA) in neonate*

**Purpose:** A new method of mandibular distraction for neonatal and newborns with OSA with multiple advantages over conventional techniques: 1. rapid distraction rate. 2. Greater distraction length. 3. Close reduction of open bite. 4. avoid or decannulate tracheostomy.

**Methods:** More than 30 patients underwent treatment over two year period - Indication includes Micrognathia with positive Polysomnography study for OSA, Micrognathia, Tracheostomy for micrognathia and facial scapiosis. - Surgical technique involves minimally invasive exposure and placement of anterior transfacial Steinman Pin and posterior transpharyngeal pin through superior ramus angle osteotomies and external distractor.

**Results:** Average distraction was 24-66mm, mean duration 33days, no distraction failure, and all openbiteautocorrected. All patients with Tracheostomies and no lower airway obstruction were decannulated, all pruzansky type III hemifacial microsomia were successfully distracted. Repeat sleep studies confirmed resolution of OSA in all patient except 3 patients.

**Conclusion:** Several advantages of described technique were realized. Device loosening does not result in failure, gauging of pin forces permits recognized early ossification, reosteotomies allows subsequent distraction up to 66 mm, no vector planning is needed, planned over-correction, closed reduction and auto-correction of open bite and minimal scapre.

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