### Use of Growth Factors for Everyday Oral Surgery

**How Can We Achieve Optimal Healing of Extraction, Graft, or Implant Sites?**

1. Atraumatic surgery with delicate tissue handling
2. Proper closure techniques
3. Detailed post operative instructions

**Platelet Rich Growth Factors (PRGF)**

4. **rhBMP-2** (recombinant human bone Morphogenic protein)

### What is PRGF?

1. Growth factors high in concentrate in platelets
2. Promotes healing of bone and soft tissue
3. Derived from patients' blood.
4. Used either as fibrin alone (‘Membrane’ application) or as part of bone matrix complex
5. rhBMP-2 is a recombinant form of BMP

### Extraction Sites

1. The prepared fibrin / PDGF is placed in the socket and a stabilizing suture is placed.
2. Faster bone growth
3. Earlier entry for implant placement (6 weeks)

**Extraction Site Defects**

1. This defect was treated by placement of autologous bone mixed with plasma and covered with autologous fibrin *(No Membrane)*
2. Site at 4 months shows well healed site, ready for implant placement

### Bony Defect in Implant Site

1. This defect was treated by placement of autologous bone mixed with PRGF, covered with autologous fibrin and a resorbable membrane soaked in PRGF
2. Site at 4 months is shown.

### Implant Placement with PRGF

1. Experimental: After 8 weeks, 134% increase in bone interface contact
2. Improvement of bone apposition and increased Osseointegration???

*More Studies needed for this application.*