Rapid IMF Device. Temporary mandibular fixation device.
Indications

Rapid IMF is an adjustable flexible plastic band that wraps around a tooth to create an anchorage point for temporary maxillomandibular fixation and immobilization (similar to an orthodontic band).

Rapid IMF is suitable for:
- Preoperative fixation
- Peroperative fixation (intraoperative)
- Short-term (up to 3 weeks) fixation for minimally displaced fractures
- Splintage of post-jaw-dislocation

Contraindications
- Complex fractures
- Periodontal disease
- Dental neglect
- Orthognathic surgery
- Use in children (under 15 years)

Slim, rigid tip makes the tie easy to insert.
Preparation

**Good planning and practice**

- Assess which teeth will serve for anchorage by viewing the preoperative x-ray
- At least **six** anchorage points are required, but **eight** (four in each arch) are preferred
- Choose teeth with good bony support which are not overly crowded and which have contact points on both sides
- Ties should be selected and positioned based on quadrant image to the right
- Tighten the ties to a firm fingertight; similarly the elastic loading is recommended to be firm
- **While in place, ties must always be loaded by elastic chain tension to avoid mucosal pressure ulceration**
- Check health of anchored teeth
- **If left on postoperatively, follow-up must be conducted at regular intervals (e.g., days 1, 3, etc.) to ensure proper tensioning of the components until removal**
- Use a scalpel and straight mosquito forceps for assistance in the procedure (#15 scalpel recommended)
- After removal of device, patient should be switched to a soft diet as soon as possible

An angle fracture treated with the Rapid IMF device intraoperatively. IMF removed at the end of the procedure.
Placement of Anchorage Ties

1
Select a tooth in each quadrant with contact points medially and laterally. Proper orientation of the tie is with the belt extending posteriorly and the narrow tip of the anchorage peg pointing apically.

2
With the help of forceps, guide the metal tip of the tie through the interdental space on the lateral side of the tooth from buccal to lingual.

3
From the lingual side, ease the belt through, applying light pressure. Keep the belt off the contact points to ease insertion. **Do not pull the belt through completely.** Leave enough length on the buccal side so the anchorage point can be positioned on the medial side of the tooth (see arrow).

4
Confirm the position by pressing the anchorage point into the medial interdental space.

5
Pass the belt back through the medial interdental space as shown. Ease the entire belt through, applying light pressure.
Pass the belt through the anchorage point until the belt engages the locking mechanism.

Pull the belt away from the contact point and push the anchorage point down the belt, firmly into the interdental space on the medial side of the tooth.

Final tightening is completed by grasping the belt close to the anchorage point and rotating the tip medially so that the belt is tightened by at least one more notch. Tighten in a controlled manner, to avoid stretching the belt. If the belt breaks, replace the tie.

Remove the excess belt with a scalpel by cutting on the flat edge on the buccal surface of the anchorage point. Assess firmness by pressing down on the anchorage point. **Do not lever the tip of the anchorage point.**

Repeat steps until there are a minimum of 3–5 ties in both the maxillary and the mandibular arches. Distribute ties evenly across each arch.
Placement of Elastic Chain

1
With the help of forceps, pass a chain link over an anterior anchorage point.

2
Pull the chain link down until it is secured under the “lip” on the anchorage point.

3
Maintaining gentle traction on the chain, loop the chain behind anchorage points in a zigzag manner, like lacing a hiking boot.

4
Secure the final link over an easily accessible upper anterior anchorage point.

5
Secure as shown.
6

Cut excess chain.

7

Check for proper occlusion. Readjust if required.

**Important:** Always check and adjust the chain tension at review days (e.g., days 1, 3, etc.).
Removal of Ties

1. Lever the top of the tie outward as shown.

2. Cut the belt at the weak point (which is marked by a vertical line on the belt) as shown.

3. Grasp the tie with forceps and disengage.

4. Gently remove the tie and belt.
- Ties must always be loaded by elastic chain tension to prevent mucosal pressure ulceration
- The tie belt should **not** be crushed by forceps as this will reduce lock strength
- Ties must be removed from any teeth with evidence, or suspicion, of traction-induced movement, or from teeth that become sensitive or painful
- The surgeon should discuss with the patient the use and expectations of the product, and postoperative care
- Patients must be reviewed according to product guidelines

**Important:** The product must be restricted to appropriate teeth, and sufficient anchorage points must be used for adequate reduction and stabilization. At least 6–8 anchorage points are needed.
08.000.501.01S Rapid IMF Device, one procedure pack, sterile

**Note:** For single-use only; do not resterilize.