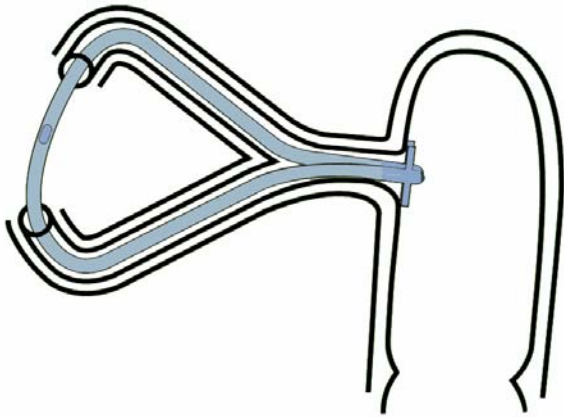


FCI Ophthalmics Self-Retaining Bicanaliculus Intubation Set



For approximately the last 15 years, lacrimal duct surgery has been in full swing, stimulated by a demand for results from our patients where tearing becomes an ever increasing cause of office visits.

Up to now we have been using bicanalicular and monocalicular stents. These devices continue to be very useful in the treatment of NLDO but they require a certain level of skill and they are usually inserted in the operating room.

For one year now, we have available a new type of stent: the Self-Retaining Bicanalicular Stent. This stent follows the principal of lacrimal duct intubation treatment with silicone tubing, a tried and true surgical technique.

This stent is indicated for horizontal lacrimal duct obstruction and in particular for punctal stenosis.

MATERIAL & METHOD:

➤ The Self-Retaining Stent (SRS)

The SRS consists of a silicone tube 25, 30, or 35mm long and 0.64mm wide; at each end is an anchor-shaped head to allow fixation. Each head consists of two flexible winglets that fold inwards during insertion through the punctum and spread back out after passage through the junction of the common canaliculus and lacrimal sac, thus securing the stent's fixation. A centrally placed marking on the tube acts as a reference point and allows verification of proper stent positioning following insertion.



➤ Indications

- Punctal pathologies:
- Stenoses: senile, post-radiotherapy, post-chemotherapy, dermatological
- Canalicular pathologies:
- Infectious
 - Traumatic
 - Prevention of canalicular stenoses: during radiotherapy and viral infections

Certain cases of tearing with permeable lacrimal ducts

➤ Insertion Technique

Insertion of the stent is quick and easy and mostly painless. It is performed in the office behind a slit lamp, using anesthetic eye drops.



Disposable Sizer (sold separately)



Disposable dilator (included)

The SRS is available in three lengths determined by disposable sizers. After dilating the superior and inferior puncta using a 1mm calibrated dilator supplied with the stent, it is necessary to verify the absence of canalicular stenosis by probing.

The stent is introduced first through the superior punctum and then through the inferior. Following insertion, it is necessary to verify good positioning of the stent, by making sure the central reference marking is situated in between both puncta and by assuring good stent mobility during each blink. The stent remains in place for two months.

➤ Patient Base

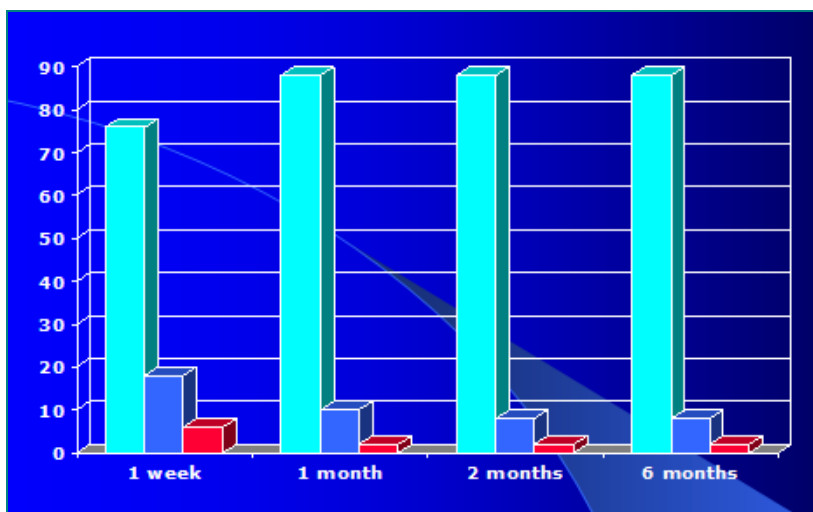
The study covered 46 cases, 20 men, 26 women. Medium age was 71 (36-86). It included patients complaining of chronic tearing over several months to several years due to punctal stenosis. Most of the stenoses were age related, some due to radiotherapy, one post chemotherapy and two cases were dermatological in nature.




An initial clinical examination verifies that the tearing is not ocular in nature, and confirms the absence of stenosis of the canaliculus and naso-lacrimal duct.

➤ Results

The patients were examined at 8, 30, 60 and 180 days. A corticosteroid antibiotic is prescribed for the first week, and then antiseptic drops until the stent is removed. The results are sorted into 3 categories:

- Good - complete elimination of tearing
- Average - strong improvement with occasional intermittent tearing
- Failure - no improvement



	Cured
	Improved
	Failed

The patients will be judged based on a questionnaire and clinical examination which includes a Jones dye test.

At six months we note the following:

88 %	completely cured
8%	show improvement
2%	failures
2%	dropouts

➤ Complications

No real complication was noted. We had 3 cases of minor conjunctival irritation which were resolved in one week, and a few cases of diminished palpebral fissure. Stent extrusion was noted in 15% of cases which is comparable or even higher than studies on traditional bicanalicular nasolacrimal duct intubation, however, the replacement of the stent is much easier since it is performed in the office setting with no inconvenience.

➤ Discussions

Results are achieved quickly since 76% of the patients are cured in one week, and most (88%) in one month thanks to a certain stabilizing effect with the passage of time. Its ease of use and absence of morbidity makes this type of therapeutic treatment more attractive for older patients who refuse any kind of surgical intervention.

The stent exposure rate must be controlled by proper patient instructions similar to those given following classic bicanalicular nasolacrimal duct intubation.

- Wear protective eyeglasses following procedure
- Wear bandage or eye shield at night
- Use special care when washing and administering drops

➤ Conclusion

Based on these initial results, the Self-Retaining Bicanalicular Stent appears to be an important therapy with 94% of the patients showing improvement. It seems to help in the treatment of horizontal lacrimal duct obstruction, and particularly, in treating punctal stenosis thanks to its ease of insertion. It will require, nevertheless, a larger study group to confirm these results.