



ALTOMED

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[Information For The Patient](#)

Lester Jones Instruction Leaflet (1 of 2)

STERILISATION INSTRUCTIONS

Sterilisation Of Implantable Glass Tubes: Before sterilising, clean the tubes with Isopropyl Alcohol (following the manufacturer's instructions) and rinse with Sterile Water. Steam sterilise the tubes using a standard 134°C -137°C cycle with a 3 minute holding time, use a peel pouch to protect sterility. Ensure the tube is thoroughly dry after sterilisation – Use HTM2010 where appropriate. Repeated processing or mishandling may damage these products. To prevent devitrification do not process tubes more than 10 times

Sterilisation Of Polyethylene Tubes and Cleaning Rods:

Do not autoclave Polyethylene Tubes or Cleaning Rods!

Polyethylene Tubes and Cleaning Rods should be cleaned and packed as above but only sterilised using Ethylene Oxide to EN556 using a protocol verified by the sterilisation plant under EN550, ISO 9001 and ISO 13485 procedures. This product should only be used by a suitably trained and qualified Physician under normal operating room conditions.

CE 0120



CAUTION:

**GLASS TUBE
IS FRAGILE
HANDLE
WITH CARE**

Maintenance:

To prevent infection, patients should be instructed to use antibiotic solution four times a day and irrigate with this same solution daily for 7 – 10 days, as well as an antibiotic ointment applied to the suture line for 7 – 10 days post operatively. Periodic irrigation with saline via an irrigating syringe or regular syringe attached to a piece of tubing can aid in preventing mucus accumulation.

If the prosthesis shifts laterally, the patient should seek medical attention.

If a tube is expelled, the patient should see the Physician as soon as possible as complete closure of the tract can occur as soon as one week after the tube has been removed.

Patient Information:

The patient should be advised to inform any unknowing Physician of the need for special care when packing the nose, so that the Physician does not pack too high in the nose around the Lester Jones tube.

The patient should be taught to “sniff” and to “blow” the nose when possible, especially during the first few postoperative weeks. If patients anticipate coughing, sneezing or must blow their nose, they should close their eyelids tightly and place a finger over the tube at the medial canthus (over the end of the tube) to prevent dislodging it.

The patient should be warned to avoid straining or vigorous exercise for 10-14 days post operatively to decrease edema and the possibility of nasal bleeding.

Possible Effects:

Haemorrhage - The patient should be warned of the possibility that late haemorrhage may occur for 10 – 14 days.

Keloid And Scar Formation - The possibility of hypertrophic scar formation or keloids should be discussed with the patients preoperatively.

Diplopia – there is a rare risk of diplopia following insertion of the tubes

Conjunctivitis – This may occur as a result of or independent of nasal infection. Frequent irrigation during periods of nasal congestion or infection to prevent retrograde accumulation of bacteria and mucus is helpful in preventing this problem. Irrigation of antibiotic solution and topical application of same appear to clear conjunctivitis fairly rapidly.

Other – It is possible to experience ocular irritation from cigarette smoke while smoking. It has also been reported that patients have felt an air current before the eyes during inspiration and expiration. Some users have also heard whistling noises during inspiration and expiration, and some have stated their glasses fogged with “heavy” breathing.

Patients should be advised that they will probably need to retain their tubes for the rest of their lives.

Despite the complications and necessity for further surgical intervention in many cases, the majority of patients are pleased with the results of Canalicular bypass surgery.

[Information For The Surgeon](#)

Lester Jones Instruction Leaflet (1 of 2)

Implantation and restriction on implants:

A longer Jones tube will generally be required for children as they grow older and the distance from the medial canthus to the nasal cavity lengthens. Because co-operation of the recipient is required for after-care of Jones' Tubes, their use is best avoided in children under teenage or in the mentally retarded. Similarly, implantation is probably inappropriate where after-care is unavailable as most prostheses eventually require some form of active management. To prevent cross contamination, a tube should only be used on one patient.

Operative Care – Physician:

It is important that a suitably trained person inspects the tube for any signs of damage before insertion (e.g. scratches, chips, cracks, discolouration etc). Damage can be caused through incorrect handling or during processing if the correct care is not taken. If in doubt do not use. Do not use tubes that have been dropped or are damaged.

- a.) Meticulous attention to achieving haemostasis at the time of surgery will usually obviate the necessity for nasal packing.
- b.) If there is exudate present, irrigate with antibiotic solution during surgery and order parenteral antibiotics post operatively.
- c.) Malposition of the tubes is one of the most common complications that are encountered. Placing the tube at a 45° angle several millimetres away from the nasal septum and anchoring it to the skin edge with a suture attached to the medial canthal flange will aid tremendously in preventing this complication. Tubes with a hole in the larger flange are used almost exclusively for this purpose.
- d.) If having difficulty inserting the tube, the small end of the small metal dilator can be inserted, followed by the larger end, then the small end of the larger dilator. This is followed by inserting the tube which is threaded, collar first, over a #1 Bowman Probe. If any difficulty is still encountered with the insertion, the larger end of the large dilator is inserted after which the Pyrex Tube will pass in easily. If the passage has contracted too much for insertion of the dilators, Bowman Probes may be inserted, followed by the curved Ziegler Punctum Dilator until the regular dilators will enter. If these fail, Zylocaine 1% should be injected above and below the passage followed by the insertion of a small Bowman Probe, then a Canaliculus Knife or even a sharp guide needle and Graefe Knife

Post operative Care – Physician:

- a.) The tube should be inspected approximately every 6-8 months though many patients maintain clean tubes for years. To remove the tube the Physician should apply Topical Proparacaine Hydrochloride / Ophthaine (or similar) over the eye, and remove the tube from the CDCR ostium with the end of a lacrimal needle or the Physician's fingernail.
- b.) At inspections, the bore of the bypass tube should be cleared of accumulated mucus by the use of a plastic bristle and forceful irrigation with saline. Passing a probe, smaller than the internal diameter of the tube, may be necessary to clear debris, mucus etc. from the lumen. Making an inspiratory or expiratory effort against resistance can aid in clearing the tube.
- c.) If the outer surface is not cleaned a fibrous sheath tends to form, this often causes recurrent infections.
- d.) Cleaning will be necessary periodically if a hard covering develops around the tube and prevents proper drainage with excessive mucus accumulation, local irritation etc. Alcohol removes the material and the tube is replaced after cleansing and sterilization unless the fit is not proper.
- e.) Granulation tissue may also occur at either end of the tube and can usually be removed quite easily with toothed forceps. This problem also occurs more often at the conjunctival end of the tube. It may be helpful to carefully apply 0.5% silver nitrate sticks to aid in cauterisation and prevent recurrences. Changing the diameter of the conjunctival flange, length and/or position of the tube may be necessary to aid in preventing recurrence of redundant mucosa or granulation tissue.
- f.) Redundancy of the mucosa may accumulate at either end of the tube and should be carefully excised and cauterised if necessary. The flaccid conjunctiva lends itself more so to this problem than the more rigid nasal mucosa.

Phospholine Iodide toxicity:

If phospholine iodide drops are used in the treatment, this may result in abdominal pain and cramping secondary to systemic absorption of echothiophate. Severe diarrhoea, fatigue, weight loss and prostration may also occur. These symptoms may disappear after two to three days of cessation of drops.

Replacing tubes:

Local anaesthesia is usually sufficient except in children or extremely anxious adults. A dilator should be left in place while cleaning, and occasionally a larger dilator will be necessary to reinsert the tube. Whilst the tract remains patent for several days after removal of a tube, it is often possible to replace the bypass tube (placing it over a fine guide wire) using either topical or infiltrative local anaesthesia. Prolonged removal of the prosthesis leads to stenosis or closure of the fistula and recurrence of watering. Depending upon the amount of closure the Physician may have to use a Graefe knife, trocar, trephine or progressively larger dilators to re-enlarge the passageway. If the bony aperture of the previous operation was not of sufficient diameter, the surgeon may have to utilise a bone rasp to enlarge the diameter to allow proper positioning of the tube.