

alcohol, sterilize by boiling in water for 20 minutes.

If desired to be stored, use 95 per cent. alcohol.

Horse hair is chiefly used in suturing wounds of the face, as the scars it leaves are small.

Catgut has the great advantage over some other forms of ligatures of being readily absorbed by the tissues. It is made from the intestine of the sheep, which is first scraped so as to leave only the submucous layer; it is then twisted, dried and cut into strips of appropriate length and thickness.

It is very difficult to render perfectly sterile, and as yet no method can be used without suspicion. Every hospital and surgeon have their own methods, and the following are only a few examples of the ones used.

No. 1.—Cut the gut into desired lengths, form them into rings, the end should be tied very loosely to prevent the gut from breaking; immerse in Oil of Juniper for 48 hours in sterile glass jar with air-tight fitting glass stopper or lid. Remove with sterile forceps, place in a glass jar containing 99.8 per cent. alcohol (Squibb's), place in water bath and boil for 45 minutes for three successive days. Add alcohol as needed.

If the catgut has been exposed, it should be replaced in the Juniper oil before sterilizing again; this proceeding will prevent the catgut from being brittle. For a moist warm climate this has proven to be a good method.

No. 2.—Cut the catgut as in method No. 1, place in alcohol and boil in water-bath for 45 minutes for three successive days.

No. 3.—Take sizes 0—4. Place for half-an-hour in alcohol to which has been added 25 grs. Tartaric Acid to each oz. of alcohol. Remove and place between folds of bichloride towels. Place in the Oil of Juniper berries ten days before using. When ready for use, cut in suitable lengths, wipe with a bichloride towel, and place in an alcoholic solution of bichloride 1-1000 or 95 per cent. alcohol.

No. 4.—First immerse the catgut in ether for 48 hours, then place it in a solution composed of xxv. minims of Sulphuric Acid to ʒi. of Glycerine for 45 minutes; from this solution it is removed and dried between bichloride towels and put in a mixture of equal parts of alcohol and Johnson's ethereal soap and allowed to stand ten minutes; this neutralizes the acid. Next put it for one hour in a solution composed of Tartaric Acid ʒi., grs. xv., and Absol Alcohol ʒvss.

Remove and keep in alcohol until needed. During an operation it should be immersed in a

solution of alcohol 1 part and of Mercury Sol. 1-1000—4 parts.

No. 5.—Wash the catgut first in Absolute Alcohol, then place it in the Oil of Juniper berries for 24 hours, after which keep it in Absol. Alcohol ready for use. When it is desired to have the gut last longer, as in sutures and the ligation of large arteries, place the catgut first in Absol. Alcohol, then in 5 per cent. Carbolic Acid Solution to which has been added grs. xxx. of Bicarbonate of Potass, where it should be kept 48 hours or longer, as the surgeon may direct, after which it is preserved in alcohol. This gut will last from 14 to 21 days.

No. 6.—Soak the catgut in Bichloride of Mercury Sol. 1-1000 for one hour, then in Absol. Alcohol one hour. Following this, soak for 48 hours in Oil of Juniper and wind on glass reels. Many surgeons omit the use of Oil of Juniper in this process.

For half-an-hour before use, the reels of catgut may be placed in a jar containing alcohol and boiled in a water bath.

No. 7.—Cumol sterilization of catgut is one of the latest methods, and if properly and carefully prepared, one of the best and safest. A Cumol Sterilizer can be obtained at Shearer, King and Comp, New York; N.Y., and a printed direction follows. One of the most important things is the drying process, before and after the sterilization in the Cumol; if this is done properly we have not only a very strong ligature, but one that we can use with very little suspicion. Cumol is very inflammable and should be handled with great care.

No. 8.—Chromicized Catgut:—

Pure Carbolic Acid	ʒi
Sol. Chromic Acid 1-4000.....	ʒxx

Soak the catgut for 48 hours, remove and dry well between sterile towels, place in 1—5 carbolized oil.

No. 9.—Chromic Acid Sol. 1—5.

Mix ʒi. Chromic Acid with Glycerine ʒv.

Soak catgut in the emulsion for four days, dry between sterile towels, then store in carbolized glycerine. This catgut will remain unabsorbed for about one week.

Linen Thread.—Linen thread is used as a suture and also as a ligature carrier for silver wire. It should be wound on glass reels and sterilized by boiling in water under cover for 20 minutes or in the steam sterilizer under 15 lbs. pressure.

Whip Cords.—Whip cords are used as a ligature to fixate the uterus and very large fibroid tumours in abdominal hysterectomy.

They are sterilized in the same manner as the linen thread.

[previous page](#)

[next page](#)