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SURGICAL PACKING
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Fig. 1.

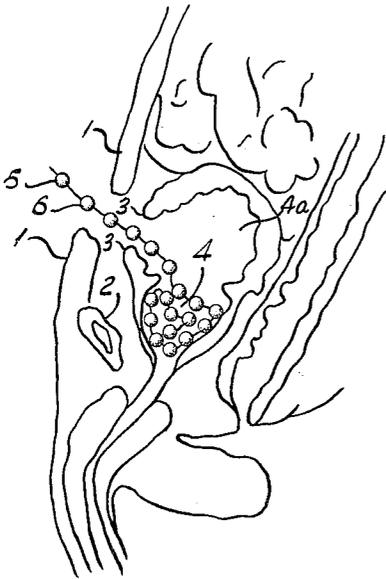
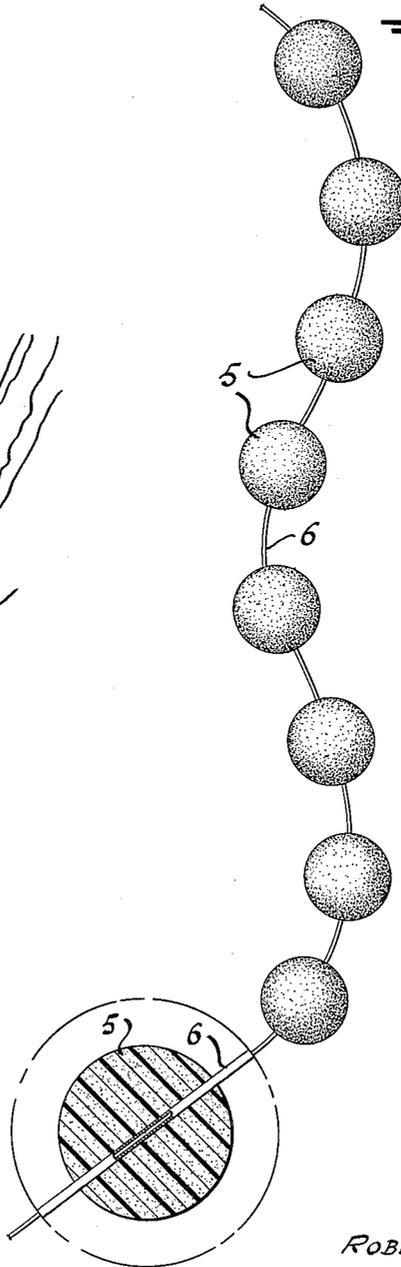


Fig. 2.



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SURGICAL PACKING

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This invention relates generally to a hemostatic packing for deep wounds and is more particularly concerned with a packing of the prostatic fossa after the removal of the prostate in an operation called prostatectomy.

The packing forming part of this invention can be advantageously used in a prostatectomy. In this type of an operation, the surgeon removes the portion of the prostate which constitutes the growth of a tumor. The removed part varies in size from that of a small marble to that of a large orange. The precise medical terminology for this operation is removal of benign prostatic hypertrophy.

A prostatectomy results in heavy bleeding and the danger of a serious hemorrhage is generally present during this type of operation.

Many types of packing to control bleeding have been used heretofore after the removal of the prostate gland to facilitate hemostasis none of which have really proven satisfactory. For instance, it was customary to use packing of gauze-like bandages or rubber sheets. This type of packing often disintegrated in the wound, leaving residues in the prostatic bed after the packing was removed. Some of these residues had later to be removed surgically.

More recently, a cone of body-liquid-digestible starch has been used for packing the prostatic fossa. This type of packing has the disadvantage that the length of stay of the cone in the wound and therefore its effective use as a packing, cannot be controlled. Furthermore, the size of the starch cone cannot be varied to fit the prostatic fossa.

It is a general object of this invention to provide a hemostatic packing that overcomes the aforementioned disadvantages.

It is another object of this invention to provide a hemostatic packing of variable size and made of resilient material, so that it may be easily handled when being placed into a wound and can be used in conjunction with different types of wounds.

The novel features which are considered as characteristic for the invention are set forth in particular in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description when read in connection with the accompanying drawings, in which:

FIG. 1 is a sectional view of a male human body, on which a prostatectomy has been performed and the prostatic fossa has been packed with the packing forming part of this invention;

FIG. 2 is a plan view of a string of the packing showing one of the absorbent balls in section.

Referring now to the drawings in FIG. 1, the abdominal wall is cut transversely about four inches above the pubic bone 2. The incision is deepened until the muscles 1 of the abdomen are reached. The muscles 1 are separated so as to expose the underlying urinary bladder 3. The surgeon cuts the bladder 3 open (as illustrated in FIG. 1) and then inserts his right hand into the bladder cavity 4a and with the index finger forcibly shells out the prostatic tumor. The area from which the prostate is removed is called the prostatic fossa 4. This area begins to bleed heavily after the prostate has been removed. The hemostatic packing forming part of this invention can then be conveniently inserted into the fossa, thereby first reducing and then stopping the bleeding.

This hemostatic packing comprises a thread 6, prefer-

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ably made of nylon which is a body-liquid-non-digestible material or the like. The thread 6 may be either solid or hollow. A plurality of equally spaced balls 5 are centrally secured to the thread 6. The balls 5 are made of absorbent material and are approximately half an inch in diameter. The following is a list of some of the materials suitable for the manufacture of the new prostatic packing:

- Urethane foam
- Latex
- Polyester
- Polyether
- Vinyl
- Sponge rubber
- Tex foams
- Foam rubber
- Natural sponge

The balls 5 are preferably covered with topical thrombin, a sterile hemostatic powder obtained from bovine plasma. This substance clots the blood by acting directly on fibrinogen thereby speeding up the stoppage of the bleeding.

The packing may be left in the wound as long as it is necessary for the blood clot to form. The internal wound, as for instance the prostatic fossa in a prostatectomy, may be fed medicinal solutions through the hollow nylon thread 6 while the packing remains in the wound. A portion of the nylon thread 6 is always left outside the wounds so that the packing may be easily removed without causing a restarting of the bleeding by manually pulling the packing out.

Although the present invention has been described in conjunction with a prostatectomy, it is to be understood that this type of packing may be used with all kinds of wounds and with all kinds of surgical operations, without departing from the spirit and scope of this invention, as those skilled in the art will readily understand. Such modifications and variations are considered to be within the purview and scope of the invention and appended claims.

What is claimed is:

1. A surgical packing comprising a hollow nylon thread, a plurality of absorbent balls centrally secured to said thread in spaced relationship to each other.
2. A surgical packing as set forth in claim 1, wherein said absorbent balls consist of sponge rubber.
3. A surgical packing as set forth in claim 1, wherein said absorbent balls consist of foam rubber.
4. A surgical packing as set forth in claim 1, wherein said absorbent balls consist of natural sponge.
5. A surgical packing comprising a hollow thread of body-liquid-non-digestible material, a plurality of absorbent members secured to said thread in spaced relationship to each other.
6. A surgical packing comprising a hollow thread of plastic body-liquid-non-digestible material, a plurality of absorbent members secured to said thread in spaced relationship to each other, said absorbent members being treated with a sterile hemostatic powder.
7. A surgical packing comprising a hollow thread of plastic material and a plurality of absorbent members secured to said thread in spaced relationship to each other.

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