

AN

INAUGURAL DISSERTATION,

ON

Wounds

SUBMITTED TO THE

PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY

OF THE

University of Nashville,

FOR THE DEGREE OF

DOCTOR OF MEDICINE.

BY

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1855

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A wound is defined to be a solution of continuity caused by external violence, and involving one or more tissues of the body. It is superficial when involving the skin alone or the skin and subcutaneous cellular tissue, muscular, when that tissue is implicated, & penetrating when it enters an organ. There are several varieties viz; incised, lacerated, punctured, contused, poisoned, and gun shot. An incised wound is inflicted with a sharp cutting instrument and presents these phenomena viz; hemorrhage pain and retraction of the edges, the hemorrhage will be more or less copious, according to the size of the injured vessel, if a small one and completely divided it will be slight. If large

and partially divided, it will be profuse.
When the blood flows from an artery,
it is of a scarlet hue, and passes out in jets,
when from a vein it is of a dark colour
and flows in a continuous stream. The
pain depends upon the injured nerves
of the part, and varies according to the
nervous endowment and temperament of
the patient. The degree of retraction of
the edges, depends upon the tissue involved
and the extent of the wound, muscular one
usually retracts greatly.

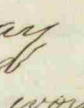
There are four indications to be fulfilled
in the treatment of this class of wounds, 1st;
to arrest hemorrhage, 2^d remove foreign bodies,
3^d; to bring the edges into apposition and
retain ^{them}, 4th; to regulate the ~~degrees~~
of inflammatory action

To arrest the flow of blood, the part should be placed at rest in an elevated position, and ligature, compression, cold, or styptics employed. Foreign substances should be removed ~~to remove~~ before inflammation is lighted up in the part which is to be accomplished with the fingers, probe or Forceps. Dirt gravel and fine particles of other substances, are to be removed, by passing a current of water through the wound. Clots of blood are likewise to be removed, since if allowed to remain, they act as foreign bodies. Several means are resorted to, to retain the edges of the wound in apposition: *viz*; adhesions, Strips, sutures, and the compress and roller.

It will not perhaps, be too great a digression from our subject, to add a description of the different kinds of strips and sutures employed. Of the former, there are two kinds in use; the isinglass in spirits spread on slips of oiled silk and the common adhesive plaster, made of resin and lead cerate spread on a piece of firm cloth. The isinglass is inferior in many respects to the common plaster and is not often used. For application the plaster is to be divided into a number of strips differing in length and width, to correspond with the size of the wound, and should always be divided in the length of the cloth to prevent stretching. ^{Pre}viously to applying them, the parts should ^(be) divested of hair and perfectly ^{scrubbed}.

To apply the strips, the isinglass side is to be held in contact with the sides of a vessel of boiling water until it becomes warm, in which condition they will adhere firmly, the edges of the wound having been previously approximated. The centre of each strip is to be placed over the wound, so that the ends shall be at equal distances on either side and make equal pressure.

The number required is to be governed by the size of the wound, sufficient space should be left between them, to allow of drainage. They are to remain on one or several days, according to circumstances. When renewed, care should be taken, that the margin of the wound is not torn asunder. To avoid this the fingers should be placed on the centre

of the strip, and each end of it raised by
the finger separately. In this way
they are easily removed. If the wound
be slight, adhesive strips alone will
suffice; when large sutures are required.
These are of several varieties; ; the
interrupted, twisted, continued quilled,
and dry suture. The interrupted su-
ture is made by transfixing the edges
of the wound, with a straight or curved
needle armed with a single ligature usu-
ally of silk, the needle is passed through
one lip of the wound about two lines
from its margin from without
inwards and through a corresponding
part of the other lip from within
outwards. In this manner all the liga-
tures are to be introduced before any are tied.

The ends of the ligatures are then to be brought together and firmly tied using the rough knot in order that the ends may be at right angles to, and not in a line with the wound. The ends are then to be clipped off with a pair of scissors near the knot.

The number of sutures must vary according to the size of the wound, sufficient space being left for the application of adhesive strips between them. The sutures are to remain in the wound from four to six days according to circumstances, until the margins adhere, and when removed, care is to be taken, not to separate the margins, the threads must be near the knot, and the ^{te} not seized with a pair

of forceps and draws out.

The twisted or hare lip suture is used principally in wounds of the face, and is made by bringing the edges into contact and transfixing them with small needles about an inch apart. The needles should be previously prepared with a head of sealing wax, and when a sufficient number has been introduced, a ligature is to be passed several times around the first in an elliptical form, and in like manner around the second, and continued until the last is embraced when the ends should be tied, and the points of the needles broken off. When the parts have become agglutinated together,

Caution is required in withdrawing the needles, not to tear apart the edges. This is best accomplished by seizing, by seizing the waxed ends with the forceps and using gentle rotations, and tractions. The ligatures should be permitted to remain, for sometime after the needles have been extracted. They cause no inconvenience and serve to maintain the apposition of the edges, and thereby promote cicatrization.

The continued or Glover's suture, is the one in common use by the surgeons, and need not be described. It is used in wounds of the alimentary canal. The quilted suture is made by passing a needle armed with a double ligature,

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Through the edges of the wound in
the usual manner at several points,
and through the ligature is on either
side parallel to the margins of the
wound, a quill or some substitute is intro-
duced, the parts are then brought into
close approximations, and the ligatures
fastened. This suture is used in wounds
of the abdomen and deep seated ones
of the thigh and perineum. The
dry suture is made by placing a
piece of adhesive plaster along each
margin of the wound, and attaching
them by means of the continued
suture. This practice is however
~~is~~ obsolete at the present day. The
compress and roller are used to aid the strips
and sutures in maintaining

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apposition of the edges of deep seated wounds
as of the thigh &c.

To limit the inflammation, the patient should assume such a position as will relax the muscles of the affected part and keep them at rest. It will not often become necessary to use constitutional remedies. Locally; employ light dressings, warm or cold water lotions of the acetate of lead and Opium. This class of wounds ordinarily heal by the first intention.

Lacerated wounds are solutions of continuity in which the parts are forcibly torn asunder by machinery &c.

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Very slight hemorrhage usually
attends them, owing to the shreds of
of these torn vessels intercepting
the flow of blood, and also to the
shock received by the system, los-
ing the heart's action, both tending
to the coagulation of the blood. In
consequence of the unevenness of the
edges and the bruised condition of
the parts, union by the first intention
is not likely to ensue.