

Categories of suture patterns

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1-Simple or Mattress.

2-Interrupted or Continuouse.

3-Appositional , inversion ,eversion.

4-Tension or relieving.

*Simple suture pattern : single passage on each side then tied.

*Mattress suture pattern : two pagssages on each side then tied .

*Interrupted suture pattern:Knote are tied following each suture passage.

Continouse suture pattern:series of connected suture passages with one knot on each end of suture line .

Appositional suture pattern:edges of incision are opposed or even with each other.

Inverting suture pattern:edges of incision roll inwards.

Everting suture pattern:edge of incision roll outward.

Simple interrupted s.p.

*advantage :

1-easy in placement.

2-adjustable tension.

3-loss of knot less dangerous.

*disadvantage :more time and material.

*Site of application:skin, fascia ,and bowell.

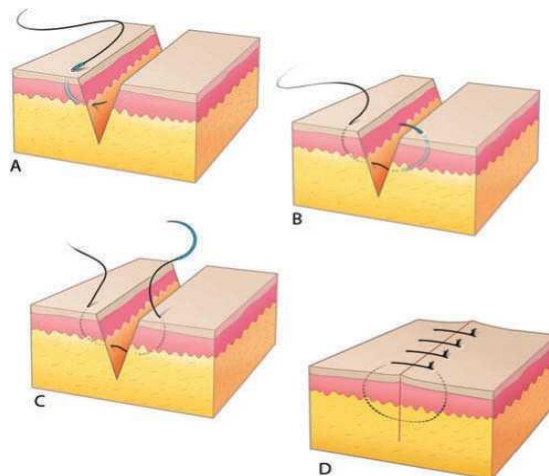


Figure C.6

Simple continuouse s.p.

*adva.:

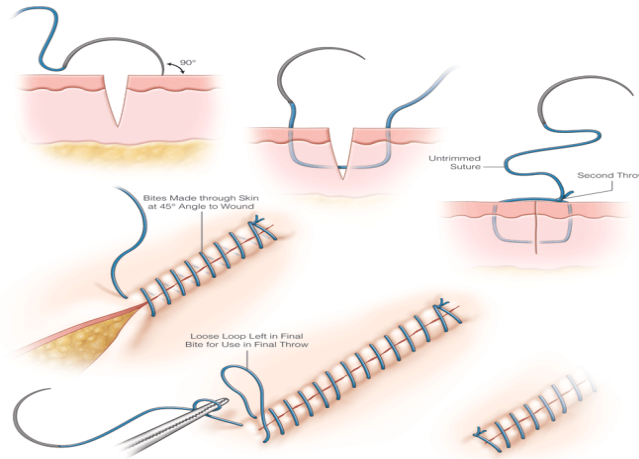
1-stronger than interrupted.

2-less suture material.

3-better closer.

*disadva. :loss of knot or suture breakage more dangerous .

Site of application : skin ,subcutaneouse,fascia ,blood vessel .



Reverdins continuouse s.p.[Interlocking suture ,lock stitch,blanket suture]

*adva. :

1-simplicity.

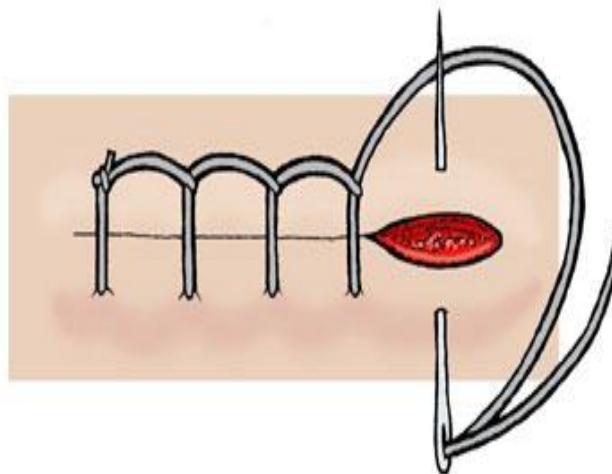
2-apposition of skin.

*disadva.:

1-not simple as simple continuouse.

2-more time and material than simple continuouse .

*site of application : skin and area under more stress.



Subcuticular S.

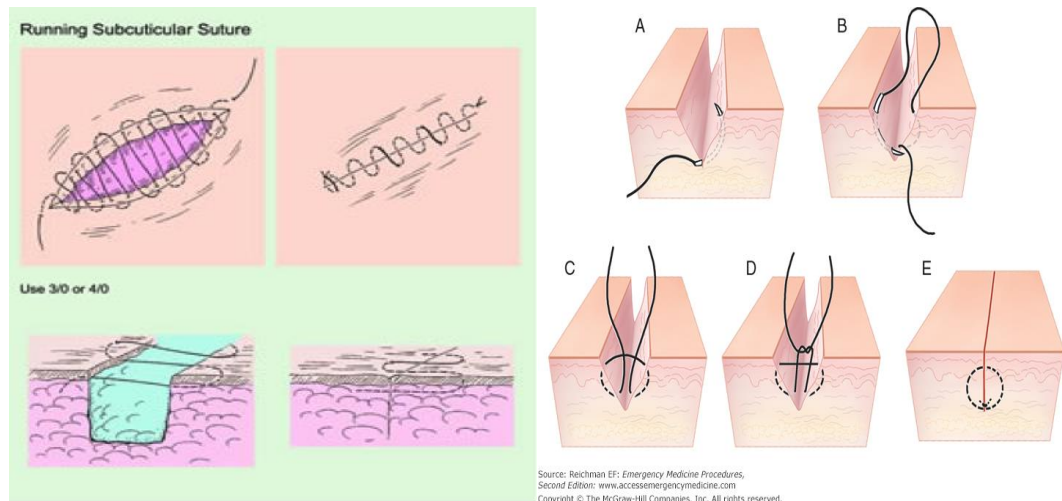
Adva. :

1-it is good tension suture.

2-less scar formation.

Disadv. :need more time.

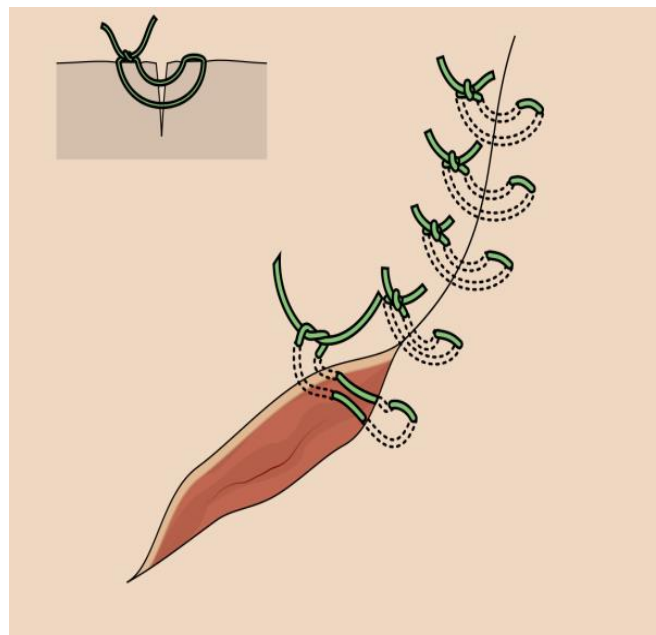
Site of application : subcutaneous closure.



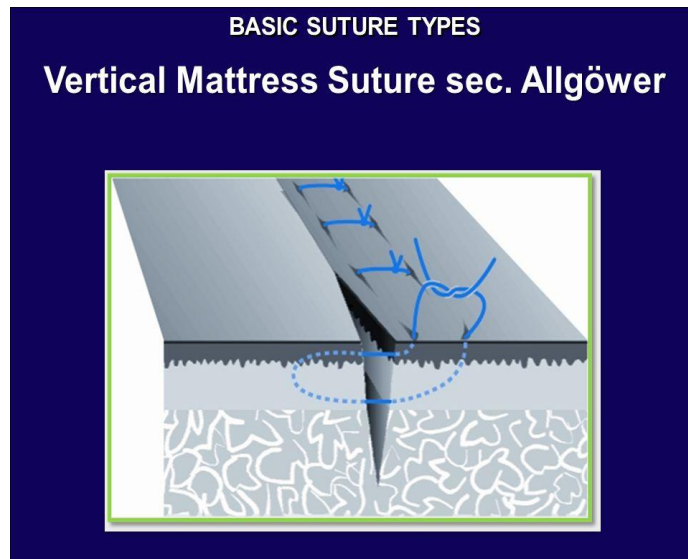
Vertical mattress s.

Adva. :it does not interfere with blood supply of skin.

Disadv.:need much suture material and more time.



Donati suture mattress : a modification of vertical mattress suture used to less scar formation.

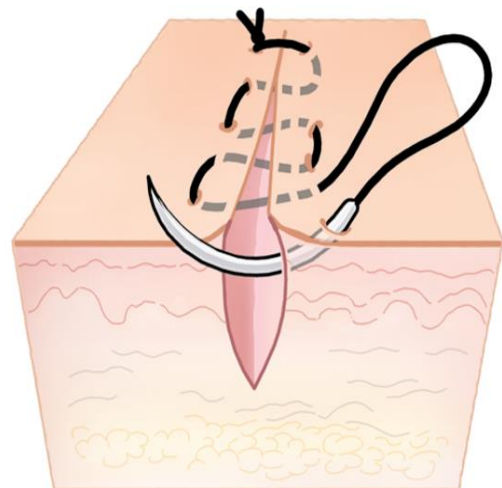
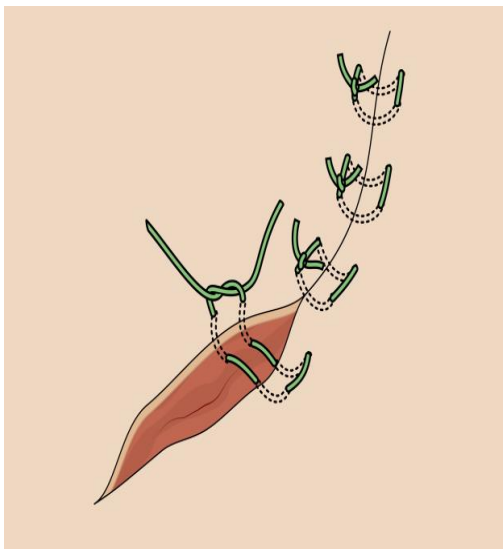


Horizontal m. s.

Adva. :used in area where much tension is placed on the skin.

Disadv.: it interfere with blood supply which delayed wound healing.

Site of application :closure in area of high tension.



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Second Edition: www.accessemergencymedicine.com
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Far-near-near-far s.

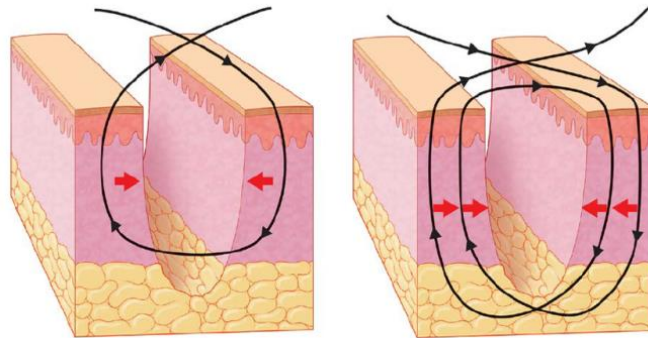
Adva.

1-good tension suture.

2-good appositional of wound edges.

Disadv. :need more time for application.

Site of application:skin ,subcutaneous and fascia.



Button s. & Quill s.: they used in wound which need more tension.

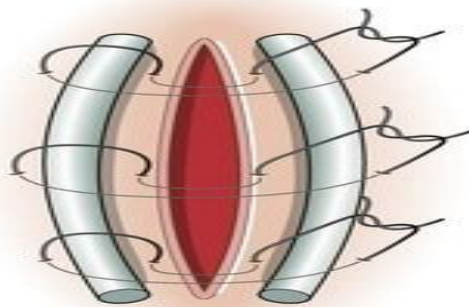
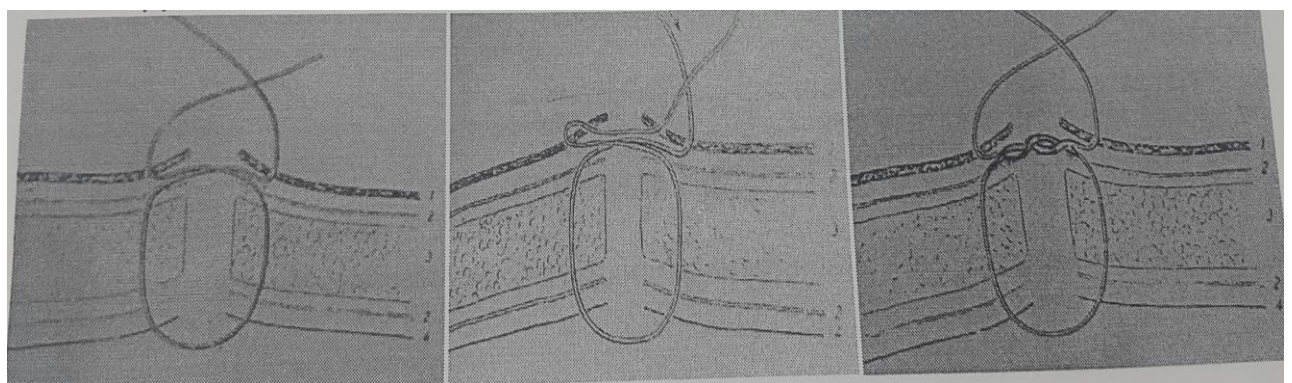


Figure 8 suture

Adva. :promoting faster healing period.

Disadv.: more time and material.

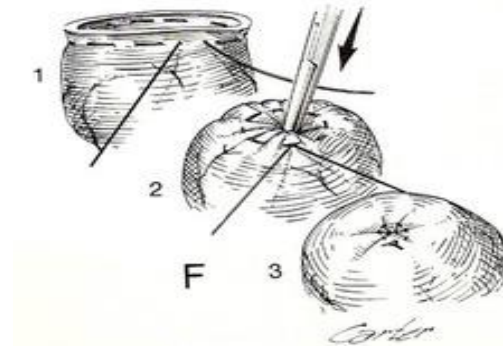
Site of application :abdominal wall.



Purse string suture

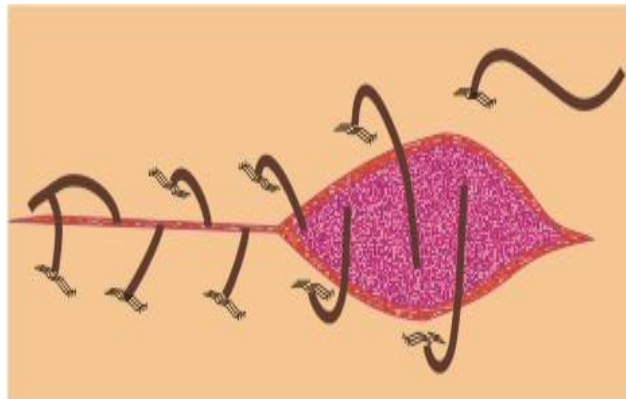
Application :

- 1- closure of hollow viscera.
- 2- fixation of tubes and catheters.
- 3- after retention of rectal prolapse.

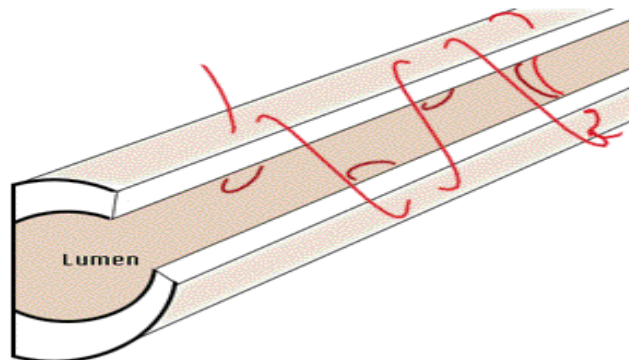


INTERNAL SUTURES

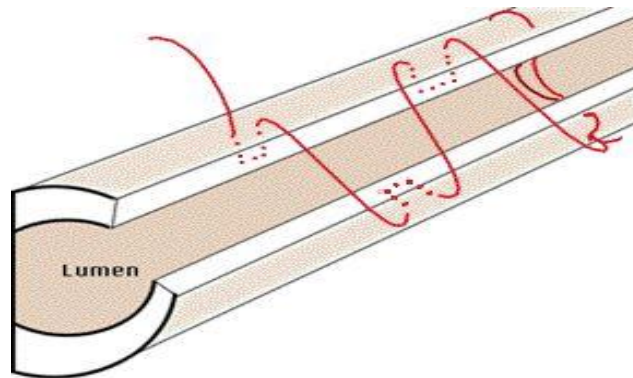
- 1-Schmieden intestinal suture.



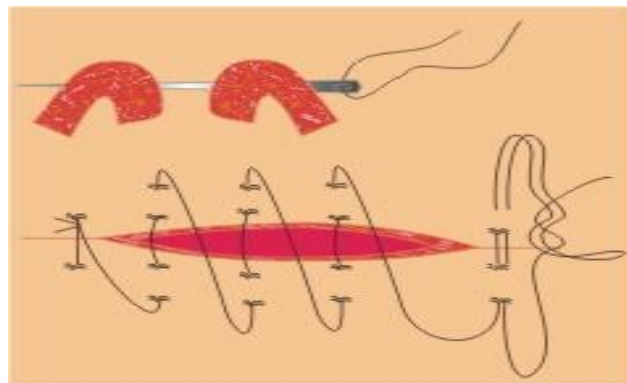
- 2-Connell suture.



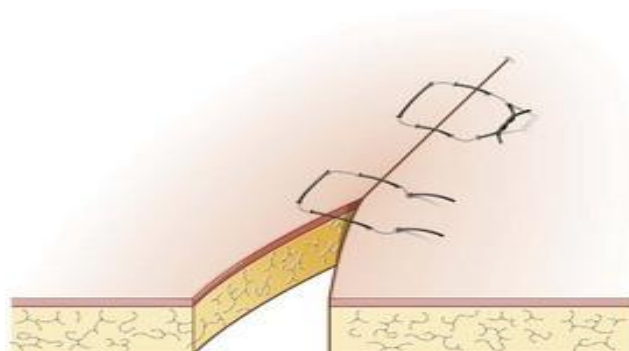
3-Cushing suture.



4-Lembert suture.



5-Halsted suture.



Application of internal suture is closing of hollow viscus(intestine).

*First row suturing : schmieden s. and connell s.

*Second row suturing : cushing s. , lembert s. and halsted s.

**Lembert s. either interrupted or continuouos.

**Halsted is only interrupted suture.

**Connell s. ,cushing s. and schmieden are continuous suture pattern.

***Schmieden s. and Connell s. are passing all layers of wound (mucosa , submucosa, muscularis and serosa).

***Lembert s. ,cushing s. and halsted s.are passing two layers only (serosa and muscularis).

****Halsted is a variation of lembert suture.

The choice of suture technique depends on :

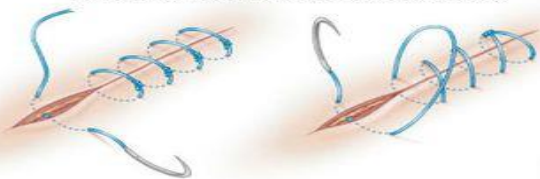
1-Type and anatomic location of the wound.

2-The thickness of the skin.

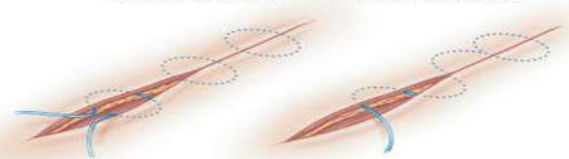
3-The degree of tension.

4-The desired cosmetic result.

Over and over sutures (interrupted and continuous)



Subcuticular suture (interrupted and continuous)



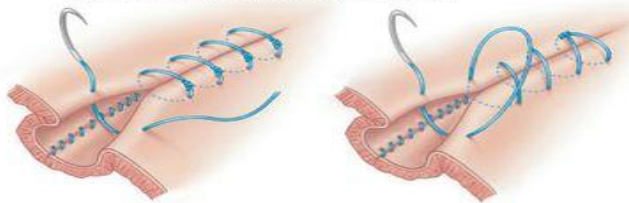
Horizontal mattress sutures (interrupted and continuous)



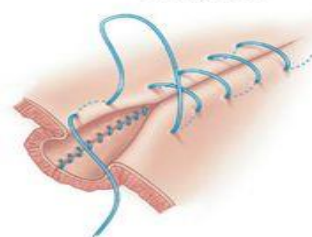
Vertical mattress sutures (interrupted and continuous)



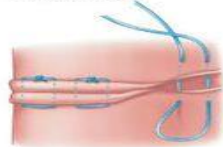
Lembert sutures (interrupted and continuous)



Cushing suture



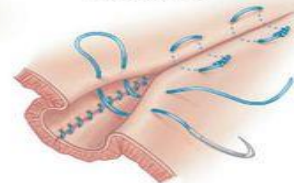
Everting suture



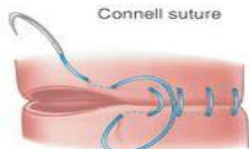
Lock-stitch suture



Halsted suture



Connell suture



Purse-string suture

