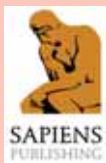




Further details of this surgical procedure can be found on pages 287–307 in *A Textbook of Postpartum Hemorrhage* edited by Christopher B-Lynch, Louis Keith, Andre Lalonde and Mahantesh Karoshi and published by Sapiens Publishing. Full details about this textbook (first published in October 2006) can be found on the publishers website: [www.sapienspublishing.com](http://www.sapienspublishing.com). It can be viewed and read in full on this website, free of charge, as well as being ordered in its standard printed format.

Other supporting material based on this textbook includes a leaflet/wallchart for midwives and other birth assistants, highlighting the immediate action recommended for managing postpartum hemorrhage – and also a CD ROM of the book and its illustrations, for teachers and lecturers.



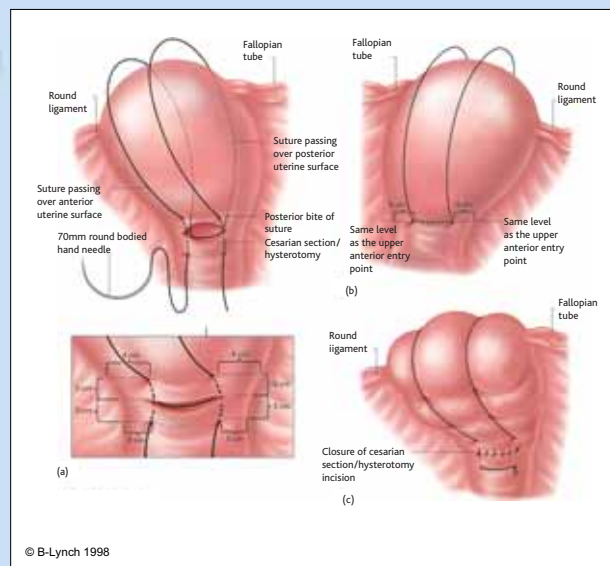
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## B-Lynch (Brace Suture) Surgical Technique for the control of massive postpartum haemorrhage: Alternative to hysterectomy

For competent application, follow these steps under general anaesthesia

1. Place the patient in the Lloyd Davies position and pass in-dwelling urinary catheter.
2. Pfannenstiel incision or re-open previous caesarean skin incision.
3. Lower segment uterine incision (after dissecting off the bladder) or remove sutures of recent caesarean section.
4. Evacuate the uterine cavity and swab out thoroughly.
5. Exteriorise the uterus and recheck to identify any bleeding point. If the bleeding is diffuse such as in cases of uterine atony or coagulopathy, profuse placenta bed bleeding (as in major degree placenta previa), placenta accreta or increta where no obvious bleeding point is observed. A bimanual compression is then first tried to assess the potential chance of success of the B-Lynch suturing technique.
6. For a major degree of placenta previa it is suggested that an independent figure of eight suture is placed in the lower segment transversely, anteriorly or posteriorly or both prior to the brace suture application if necessary. The vagina is swabbed out to confirm adequate bleeding control.
7. If the bleeding is controlled by bi-manual compression, then the procedure will work as follows:



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- i. 70mm round bodied hand needle on which Monocryl No1 suture (90cm) is mounted. This is a 70mm 1/2C. Curved Ethiguard (blunt needle) (Code W3709) (Ethicon, Somerville, N.J. a Johnson & Johnson product) used to puncture the lower uterine incision margin 3cm from the left inferior edge and 3cm from the lateral border. This approach is suggested for a surgeon standing on the patient's right hand side.
- ii. The suture is then threaded through the uterine cavity to emerge at the upper incision margin 3cm above and approximately 4cm from the left lateral border.
- iii. This is then fed anteriorly and vertically to enter the posterior wall into the uterine cavity at the same level as the upper anterior entry point.
- iv. The suture is then pulled under moderate tension assisted by bi-manual compression exerted by the assistant. The suture is passed back posteriorly through the same surface marking as for the left side, the suture is now lying horizontally in the uterine cavity. The Monocryl suture is fed through posteriorly and vertically over the fundus to lie anteriorly and vertically compressing the fundus on the right side as occurred on the left side. The needle is passed in the same fashion on the right side through the uterine cavity and out approximately 3cm anteriorly and below the lower incision margin on the right.

(BJOG 1997, 104:37 6-3 78)

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8. The two lengths of the suture are pulled taut assisted by bi-manual compression to minimise trauma. The vagina is swabbed out by the second assistant and checked to ensure that the bleeding is controlled.
9. The lower transverse uterine incision is now closed in the normal way, in one or two layers using Monocryl No1 or appropriate equivalent suture.
10. Ensure that good haemostasis is secured and whilst the uterus is compressed by the first assistant, the principal surgeon throws a knot (double throw) followed by two or three further throws to secure tension.
11. If there is uncontrollable bleeding from a placenta previa, remember, a figure of 8 Monocryl No1 suture is placed transversely, anteriorly or posteriorly or both as appropriate.
12. The uterus is checked that tension distribution is evenly spread before replacement into the abdominal cavity and the abdomen closed.

A DVD or video of this procedure is available from:

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