

# Cerclage suture type to prevent pregnancy loss in women requiring a vaginal cervical cerclage: the C-STICH RCT

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## Plain language summary

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## Plain language summary

**C**ervical cerclage is an operation performed in pregnancy to prevent miscarriage and preterm birth. A cervical cerclage is sometimes recommended in women who have had babies born prematurely before or who have had previous cervical surgery.

A cerclage operation involves a stitch being inserted around the neck of the womb (cervix) to keep it closed during pregnancy and to prevent it opening prematurely. When performing the operation, the doctor can use different types of threads made of different materials. The threads used to perform the operation are called sutures. One suture type is a single strand or monofilament thread, and the other is a multifilament braided thread with lots of thin strands woven together. Some evidence has suggested that using a monofilament suture thread prevented pregnancy loss by preventing infection. Therefore, we performed a randomised controlled trial of the use of monofilament suture thread versus braided suture thread, aiming to reduce pregnancy loss in women who were having a cerclage as part of their routine care. The women consented to take part in the study and were randomly allocated to their cerclage performed with either a monofilament or braided suture thread; there was no other change to their planned pregnancy care. What happened in their pregnancy was recorded from their medical records and analysed.

A total of 2049 women agreed to take part in the study and consented to the analysis of their pregnancy and neonatal outcomes.

Cerclage suture type for an insufficient cervix and its effects on health outcomes showed that there was no difference in pregnancy loss between the two suture threads. There was decreased maternal sepsis and decreased chorioamnionitis (which is an infection inside the womb during labour) in the women who received a monofilament suture, which needs further investigation. Although more women who had a cerclage using the monofilament thread needed a small operation and an anaesthetic, often between 36 and 37 weeks, to remove the monofilament suture prior to a vaginal birth, there were no differences in the outcomes for their babies.

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