

External aortic compression in the management of postpartum haemorrhage - a historical review

Grethe Heitmann¹, Jonne Eland², Jenny Dankelman²

¹ Department of anesthesiology, Østfold Hospital Trust, P.O. Box 300, 1714 Grålum, Norway, ² TU Delft, Mekelweg 5, 2628 CD Delft, Nederland

Background

External aortic compression (EAC) is used to achieve temporarily bleeding control in the management of postpartum haemorrhage (PPH). In Swedish recommendations, EAC is always to be considered in the management of PPH.

The aim of this historical review was to find the origins of EAC and determine for how long the technique has been recommended.

Method

A search in Delpher, Pubmed and Google Scholar on: “aorta” “haemorrhage”, “compress” and “postpartum”, spanning from 1797 to 1970 was conducted. Google translate was used to translate documents from German, Latin and French.

Results

The use of aortic compression was first documented in 1797 by Professor Ploucquet, who described a technique involving the insertion of a hand into the uterus to compress the aorta through the posterior uterine wall. In 1835, Baudelocque reported that he was the first in France to propose EAC and that he had first performed it in 1827. He also stated that Professor Ulsamer from Würzburg, Germany, was the first to perform the manoeuvre externally in 1825. The technique gained wider acceptance and was included in medical textbooks from the 1840s, highlighted by Chailly-Honoré in his textbook about childbirth as a valuable obstetric tool. Over the next decades, EAC continued to be recommended in textbooks and medical journals and was subject to discussion in letters to the editors.

Conclusion

Following the initial descriptions of EAC in the 1820s, this technique was initially proposed in publication in 1830s and recommended in medical textbooks in 1840-ties.