

Appendix Pregnancy in women with inferior vena cava filter

Supplementary Table 1. Search strategy on MEDLINE and Embase databases, 7 August 2020

Searches MEDLINE		Records
1	exp pregnancy/	894300
2	pregn*.tw.	511587
3	exp Pregnancy/ or exp Pregnancy Trimesters/ or Pregnancy Complications, Cardiovascular/	894335
4	1 or 2 or 3	1017308
5	exp vena cava filter/	2989
6	vena cava filter.tw.	1664
7	umbrella filt*.tw.	56
8	5 or 6 or 7	3629
9	4 and 8	160
10	limit 9 to english language	128
Searches Embase		Records
1	exp pregnancy/	806055
2	pregn*.tw.	719048
3	exp Pregnancy/ or exp Pregnancy Trimesters/ or Pregnancy Complications, Cardiovascular/	817188
4	1 or 2 or 3	1063149
5	exp vena cava filter/	5745
6	vena cava filter.tw.	2412
7	5 or 6	6139
8	4 and 7	303
9	limit 8 to exclude medline journals	53

Supplementary Table 2. Literature search: overview and characteristics of included studies

Author (year)	Country	Type	Study design	Number of patients with condition of interest	Number of pregnancies	IVC filter types	Outcomes on IVC filter reported?	Outcome on delivery reported?	Outcomes on VTE reported?
Rottenstreich (2019) ¹	Israel	Article	Retrospective cohort (n=24)	1	2	Retrievable	No*	No*	No*
Gupta (2008) ²	United Kingdom	Article	Case series (n=6)	5	8	Retrievable & permanent	Yes	Yes	Yes
Thomas (1997) ³	United States of America	Article	Case series (n=8)	1	1	Permanent	Yes	Yes	Yes
Maijub (2013) ⁴	United States of America	Article	Case report (n=1)	1	1	Permanent	Yes	Yes	Yes
Lee (2019) ⁵	Malaysia	Abstract	Case report (n=1)	1	1	Not reported	No	No	Yes

Abbreviations: IVC: inferior vena cava, VTE: venous thromboembolism

*It was reported that pregnancies were uneventful, but no further details were provided.

Supplementary Table 3. Joanna Briggs Institute Critical appraisal of case series and reports

JBI Critical Appraisal Checklist for Case Series	Rottenstreich et al. ¹	Gupta et al. ²	Thomas et al. ³
1. Were there clear criteria for inclusion in the case series?	+	+	+
2. Was the condition measured in a standard, reliable way for all participants included in the case series?	+	+	+
3. Were valid methods used for identification of the condition for all participants included in the case series?	+	+	+
4. Did the case series have consecutive inclusion of participants?	+	+	+
5. Did the case series have complete inclusion of participants?	+	+	+
6. Was there clear reporting of the demographics of the participants in the study?	+	+	+
7. Was there clear reporting of clinical information of the participants?	+	+	+
8. Were the outcomes or follow up results of cases clearly reported?	-	+	+
9. Was there clear reporting of the presenting site(s)/clinic(s) demographic information?	+	+	+
10. Was statistical analysis appropriate?	+	NA	NA
JBI Critical Appraisal Checklist for Case Reports	Maijub et al. ⁴	Lee et al. ⁵	
1. Were patient's demographic characteristics clearly described?	+	+	
2. Was the patient's history clearly described and presented as a timeline?	+	+	
3. Was the current clinical condition of the patient on presentation clearly described?	+	+	
4. Were diagnostic tests or assessment methods and the results clearly described?	+	-	
5. Was the intervention(s) or treatment procedure(s) clearly described?	+	-	
6. Was the post-intervention clinical condition clearly described?	+	-	
7. Were adverse events (harms) or unanticipated events identified and described?	+	-	
8. Does the case report provide takeaway lessons?	+	-	

+ : yes, - : no, ? : unclear, NA: not applicable

Source: <https://joannabriggs.org/critical-appraisal-tools>

References

1. Rottenstreich A, Kalish Y, Elchalal U, Klimov A, Bloom AI. Retrievable inferior vena cava filter utilization in obstetric patients. *Journal of Maternal-Fetal & Neonatal Medicine*. 2019;32(18):3045-3053.
2. Gupta S, Ettles DF, Robinson GJ, Lindow SW. Inferior vena cava filter use in pregnancy: preliminary experience. *Bjog-an International Journal of Obstetrics and Gynaecology*. 2008;115(6):785-788.
3. Thomas LA, Summers RR, Cardwell MS. Use of greenfield filters in pregnant women at risk for pulmonary embolism. *Southern Medical Journal*. 1997;90(2):215-217.
4. Maijub JG, Ross CB, Houser MV, Morris ME. Fetal Demise due to Uterine Trauma With Massive Intraperitoneal Hemorrhage Associated With Chronic Perforation of the Inferior Vena Cava by an Inferrenal Filter: A Case Report With Call for Definitive Consensus Regarding Filter Positioning in Nonpregnant Women of Childbearing Age. *Journal of Vascular Surgery*. 2012;56(6):1823-1823.
5. Lee BS, Selvaratnam V, Sathar J, Yap YY, Fann RJ. She Won ' t Stop Clotting Despite on Anticoagulants: A Challenging Case 2019.