

# ABSTRACT

## TITLE

A keep-it-simple embolisation strategy to treat Pelvic Congestion Syndrome without compromising clinical effectiveness.

## BACKGROUND

Chronic pelvic pain in women caused by pelvic venous congestion (PCS) is treatable by venous embolisation. There are two divergent philosophical approaches to conduct the procedure: the Keep-It-Simple (KIS) approach-embolising only the refluxing vein(s), typically only the left ovarian vein (LOV), unless right ovarian vein (ROV), left or right internal iliac vein (IIV) tributaries were also refluxing; and the Extravaganza (EXT) approach-embolising empirically almost all of the LOV, ROV, left and right IIV tributaries. The aim of the current study is to validate the effectiveness of the KIS approach to treat PCS.

## METHODS

This is a single institution retrospective non-randomised cohort study. Local ethics approval was obtained in 2022. Review of electronic records of a women's health interventional radiology clinic, for a 5-year period between 2018 and 2022, identified 154 women who had undergone diagnostic venogram for possible PCS, with a view to proceed with embolisation in the same setting, if refluxing veins were found. They were treated with a "Keep-it-simple" protocol, embolising only the refluxing ovarian veins, and / or internal iliac vein tributaries, using minimal number of coils with a "Sandwich" technique.

## RESULT

Most women (73.4%) required unilateral ovarian vein embolisation only; just 14.4% required bilateral ovarian vein embolisation; and only 12.2% required pelvic vein embolisation. Most cases required only 4 pushable coils. Clinical success was 89.1% at 6 weeks and 83.7% at 1-5 years. Pain scale drop of 5.2 on VAS (7.8 to 2.7) was achieved. For those with symptom relief, improvement was noted within 1 month in 70.9% of cases. There was no coil dislodgement and no worsening of pain.

## CONCLUSIONS

The "Keep-it-simple" approach embolising only the refluxing ovarian or internal iliac vein tributaries is sufficient to achieve good clinical outcomes, without the need to empirically embolising all ovarian and pelvic veins which could more costly and risky.