

AORTA CLAMP TO SAVE LIVES DURING CHILD BIRTH

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An aorta clamp developed by an obstetrician in the State to control torrential bleeding during the surgical management of placenta accreta spectrum (PAS), a serious obstetric complication and a significant cause of maternal mortality, has been found to be useful in containing blood loss and saving maternal lives, without any incidence of vascular injury.

The “Paily aorta clamp”, developed by V.P. Paily, senior obstetric consultant and master trainer for the Kerala Federation of Obstetrics and Gynaecology, is currently being used in multiple centres with good results. A retrospective study of 33 women with varying grades of PAS, who underwent caesarean hysterectomies as elective or emergency procedures utilising the Paily aorta clamp, appears in the March 2022 issue of the *International Journal of Gynaecology and Obstetrics* .

With the rise in caesarean sections (C-section), PAS is emerging as a major concern and is a significant cause of maternal mortality and morbidity.

A previous C-section scar is the most typical risk factor for PAS as the placenta deeply adheres to the scar tissue and into the uterine wall, sometimes extending to nearby organs, such as the bladder.

PAS management is thus a nightmare for obstetricians worldwide because, apart from the risk of catastrophic amounts of blood loss, there is also the high probability of urological injuries and massive transfusion requirements encountered during non-conservative surgery.

In high-resource settings, PAS disorders are managed by multidisciplinary teams of expert gynaecological and vascular surgeons, supported by anaesthesiologists, intensivists, radiologists and urologists.

In major tertiary centres, vascular surgeons attempt to reduce bleeding using intravascular balloon occlusion at the lower end of the abdominal aorta or the common iliac arteries.

But the application of the Paily aorta clamp helps in low resource settings, where the access to unlimited amounts of blood to transfuse and the services of a vascular surgeon might not be available, says Dr. Paily.

It is an easy aid that the obstetricians themselves can use to control bleeding and can be applied rapidly.

“We started promoting this method in 2011-12 and now, all Government Medical Colleges in the State and many private hospitals too are utilising the same to prevent torrential bleeding in PAS,” he says.

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