The use of foreign surgical material in Obstetrics

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Introduction

Oxidised regenerated cellulose mesh is one of the original types of topical haemostatic agents and is used widely in surgical procedures in order to achieve haemostasis. Developed in the 1960’s and named ‘Surgicel’, it is a plant based product that acts as a scaffold for clot formation. While advantageous in aiding with haemostasis in surgery, there have been reported cases of complication, and the following case is a prime example.

Objectives

Patient A, a 28 year old female, underwent an emergency caesarean section for suspected chorioamnionitis. The surgery was performed by a senior registrar, who placed Surgicel along the lower uterine segment following it’s closure to obtain complete surgical haemostasis. The uterovesical fold was subsequently replaced over the area.

The patient presented 2 weeks later having vaginally passed a foreign material (Image 1).

An ultrasound was performed which showed an intact uterine scar, however photo imaging and histopathological examination of the foreign product confirmed ‘Surgicel’ material. It was hypothesised that the surgicel had migrated through the uterine scar with uterine involution, and was then passed vaginally.

Discussion

This case highlights the challenges involve with the use of artificial surgical material in operative obstetrics. Furthermore, this is not the first case described in the literature that has involved similar outcomes, or other post-surgical complications. While migration of the foreign material in this case led to it being expelled vaginally, there are examples of recurrent tracheoesophageal fistula, and paraplegia after migration of Surgicel into other anatomical areas. While Surgicel and its counterparts have their place in surgery, surgeons must be mindful of it’s use and the potential outcomes associated.

References