

Myomectomy with Gelatin Sponge in Myoma Bed- A Video Presentation

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Authors hereby present a case 23-year-old female of myomectomy with vasopressin and gelatin sponge which obviated the need of blood transfusion. Myomectomy was done in an infertile woman for a 20 weeks gravid uterus size type 5 anterior solitary fibroid under spinal anaesthesia. About 60 mL of diluted vasopressin (10 units in 100 mL normal saline) was injected in the incision area. Incision was made with electrocautery. Myoma capsule was separated by blunt dissection and with the help of myoma screw fibroid was enucleated. Closure of myoma bed was started with polyglactin 1-0. First knot was applied in one angle. Then, gelatin absorbable sponge {AbGel, size (8×5×1 cm) each, Sri Gopal Krishna Labs Pvt., Ltd., Mumbai, India} was applied over myoma bed, followed by continuous simple suture to obliterate the dead space. The bite on the bed side wall started from above, went to the bottom of the bed and traversed to other side wall just above the gelatin sponge then, from bottom went above and pulled up. After completion of the first layer, second layer was given in same way as myoma bed depth was still more. Serosa was closed by continuous simple suture and here also a small piece of gelatin sponge was inserted in one area. So, myoma bed got obliterated. Altogether 1 and 1/3rd sponge was needed. Bleeding stopped by combined action - mechanical compression of suture and clotting action of gelatin sponge. On contact with bleeding surface, the sponge absorbed platelets. These platelets get damaged, once they come in contact with the walls of myriad of interstices of sponge. Thus, thromboplastin gets released from platelets which initiate coagulation cascades and clot formation [1]. Blood loss was about 80 mL. No blood transfusion was given. On six month follow-up, patient is doing well [Video: Myomectomy].

Myomectomy is an age-old operation. But haemorrhage is always a big concern to the gynaecologist. Many techniques have been described to prevent this complication. Diluted vasopressin local infiltration eases the operation by keeping the operative field blood free. In a RCT, vasopressin 20 units diluted with 20 mL normal saline was injected intramyometrially during myomectomy. Vasopressin group had 66% reduced blood loss [2]. Preoperative uterine artery embolisation with absorbable gelatin sponge resulted in very less blood loss during myomectomy [3]. Gelatin-thrombin matrix (liquid form) topical application during open myomectomy reduced the intraoperative bleeding and transfusion rates [4]. In present case, we have applied gelatin sponge directly over the bleeding myoma bed to achieve haemostasis and result was good. Gelatin sponge is very cheap and easily available and it is completely absorbed within four-six weeks [1]. Same technique can be applied for laparoscopic and robotic myomectomy.

Gelatin sponge topical application on myoma bed could be a good cost effective option to achieve haemostasis during myomectomy, especially for resource poor country.

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