

Title: SUCCESSFUL MANAGEMENT OF RECURRENT OVARIAN TORSION IN ADOLESCENT BY HOT DOG IN BUN TECHNIQUE



INTRODUCTION

- Ovarian torsion is a surgical emergency that can affect future fertility.
- Incidence of torsion in adolescent presenting with pain is 2.7% , recurrence -11%- 18%¹

OBJECTIVE

To determine effectiveness of hot dog in bun technique to prevent recurrent torsion

DISCUSSION

Causes of Recurrent Ovarian Torsion

Congenitally longer utero-ovarian ligaments, Excessive laxity of ovarian ligaments, Small uterus (allows adnexa to twist on the axis), Constipation

Method to Prevent Recurrent Ovarian Torsion

Oophoropexy: It is a surgical procedure which fixes the ovary limiting its range of movement.

Techniques - Plication of utero-ovarian ligaments, Fixation of ovary to pelvic side wall, Fixation of ovary to anterior/posterior abdominal wall

HOT DOG IN BUN TECHNIQUE

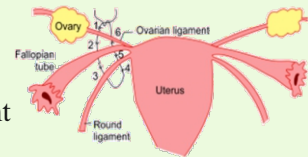
The **utero-ovarian and round ligaments** are used as the **bun** while placing the **fallopian tube** as the **hot dog** in between with or without shortening of the ovarian ligament

Suture was passed in an atraumatic fashion from the uteroovarian ligament followed by the clear area in the mesosalpinx and the round ligament and brought back in the opposite direction and tied

Advantage – It decreases the mobility of the long ligament pedicles while avoiding excessive crushing of the tube.

Literature Review

- ❖ Oldest case report in 2012 on a 12 year old girl²
- ❖ One case report from India³, laparoscopically applied this stitch on 17 year old girl



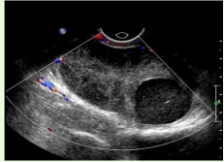

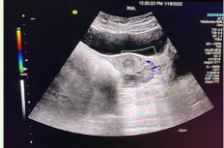
CONCLUSION

Recurrence of torsion can occur even after oophoropexy. Hot dog in bun is a good method of oophoropexy.

REFERENCES

- 1.Appelbaum H, Abraham C, Choi-Rosen J, et al: Key clinical predictors in the early diagnosis of adnexal torsion in children. J Pediatr Adolesc Gynecol 2013; 26:167
- 2.Kondrup JD, Measick J. Oophoropexy: Hot Dog in a Bun technique Journal of Minimally Invasive Gynecology 19 (2012) S151–S178.
3. Shah N H, Joshi A V, Belekhar G. Hotdog in bun: a recent technique for oophoropexy. Int J Reprod Contracept Obstet and Gynecology. 2019;8(5):2100-2102

CASE DESCRIPTION

	CASE 1	CASE 2
Age	17 yrs	14 yrs
Chief complaints	Sudden -onset of severe lower abdomen pain with vomiting – 1day.	Pain abdomen 4 days, severe lower abdomen pain with vomiting –1day.
Past History	Laparotomy for right ovarian torsion 2 years back. Right sided salpingo-oophorectomy for 14x11 cm large necrotic, hemorrhagic ovarian mass. along with oophoropexy of the contralateral side.	Laparotomy for right ovarian torsion 3 yrs back Detorsion done with oophoropexy (plication of uteroovarian ligament) of both sides
Examination	BP- 110/70 mm Hg, Pulse -110 bpm, RR - 20/ min, Per abdomen - Tenderness in left lower quadrant with guarding.	BP- 100/60 mm Hg, Pulse -118 bpm,RR - 26/ min, Per abdomen -Tenderness lower abdomen with guarding.
Investigations	Blood Investigations –WNL, UPT - Negative Ultrasound –Left ovary was enlarged (7.47x6.25x5.17cm, 126cc vol) with stromal edema, absent flow on color doppler. (Fig1) 	Blood Investigations –TLC 10,500, UPT – Neg Ultrasound -ovarian torsion (right ovarian cyst of 4.5 x 4 cm) with a minimal amount of free fluid in the pouch of Douglas.
Intraoperative Findings & Procedure Done	Left ovary was enlarged with ovarian cyst of 5x 4 cm size, with two and a half twists of turns (Fig 2)  Procedure: Ovarian detorsion with oophoropexy using hotdog in a bun technique	Right ovary 3x3 cm with 4 turns Procedure: Ovarian detorsion with oophoropexy using hotdog in a bun technique . Also prophylactic oophoropexy on left side
Postoperative	Ultrasound at 6 weeks, 6 months and 2 year - normal ovary (Fig 3) normal AMH levels. (2.93 ng/mL) 	Ultrasound at 6 weeks, 6 months and 1 year - normal ovary normal AMH levels. (1.8 ng/mL)