Intravaginal foreign body should be excluded in prepubertal cyclical vaginal bleeding without other evidence of precocious puberty

S. Upadrasta¹, L. Watson², A. Natarajan², S.M. Ng¹

1. Department of Paediatrics, Southport & Ormskirk Hospitals NHS Trust, Ormskirk 2. Department of Paediatrics, Doncaster Royal Infirmary, Doncaster

BACKGROUND & OBJECTIVES

BACKGROUND:

- Isolated prepubertal menarche is described in the absence of other signs of precocious sexual development¹ and is a self-limited condition².
- This condition remains unclear in it's aetiology and there is currently no consensus on investigations to be undertaken.

OBJECTIVES:

To evaluate the following factors associated with persistent isolated cyclical vaginal bleeding:

- Clinical presentation
- Gonadotrophin-releasing hormone (GnRH) stimulation test
- Genital examination under anaesthetic (EUA)
- Pelvic ultrasound findings

METHODS

- Retrospective case series of 14 girls with isolated prepubertal menarche
- Data collection from 2 centres between January 2007 and December 2014
- All girls presented with persistent cyclical vaginal bleeding with no other signs of precocious puberty

RESULTS

DEMOGRAPHICS

	Mean	Range
Age (years)	7.4	5.0 to 9.67
Height SDS	0.33	-1.02 to +1.68
Weight SDS	1.01	-0.74 to 2.76
BMI	19.6	14.6 to 29.3

- •Vaginal bleeding was reported to be cyclical, ranging from 1 weekly to 3 monthly, lasting 1-4 days in duration.
- •Bleeding persisted between 6 to 18 months in all girls
- •Pelvic ultrasound showed prepubertal uterus with no identifiable endometrial echo in all girls

GnRH STIMULATION TEST

	Mean	Range
LH peak (U/I)	3.1	0.3 – 14
Peak LH/FSH Ratio	0.23	0.07 - 0.66

- •Oestradiol levels were < 100 pmol/l in all girls
- Bone age showed no advancement in all girls
- •EUA was normal in 7 out of 8 girls.
- •One girl was found to have 1.5 cm foreign body; she presented with cyclical vaginal spotting weekly for 6 months prior to EUA

CONCLUSIONS

- Baseline LH, FSH, oestradiol, adrenal androgens, GnRH stimulation test, pelvic ultrasound for endometrial echo and bone age following clinical evaluation should be performed in prepubertal girls presenting with persistent and cyclical vaginal bleeding, in order to exclude precocious puberty.
- EUA should be considered in persistent isolated cyclical vaginal bleeding to exclude other causes such as intravaginal foreign body

REFERENCES:

- 1. Shanthi M. Pinto, Anne S. Garden. American Journal of Obstetrics and Gynaecology 2006; 195: 327-329
- 2. Aikaterini A.Nella, Paul B.Kaplowitz, Mary Scott Ramnitz, Radha Nandagopal. Journal of Pediatric Endocrinology and metabolism 2014; 27(9-10): 821-825