

Clinical Focus Topic #2

Vaginal Flatus

BACKGROUND INFORMATION

Vaginal wind is an embarrassing yet underreported symptom in the scientific literature. The first publication on the topic was Krissi, Medina and Stanton (2003) who described vaginal wind as symptomatic vaginal “noise, occurring during physical activity and unrelated to vaginal manipulation, such as vaginal examination or intercourse”.

Krissi et al (2003) go on to suggest that the mechanism of vaginal wind may be the creation of a “valve-like structure at the introitus, together with a real, rather than potential vaginal space”.

This definition is consistent with my experience of women presenting with this distressing symptom in clinical practice. In particular, most women have tended to be particularly symptomatic during exercise programs that require inverted manoeuvres (eg Pilates, yoga, gymnastics). The typical history seems to involve a sensation of air entering the vaginal canal during inverted postures, then releasing on return to upright.

For the women who present to my clinic, the symptom often causes significant distress, and regularly results in women avoiding exercises and social situations where the “vaginal noise” most commonly occurs.

PATIENT CHARACTERISTICS / INCIDENCE OF VAGINAL WIND

Although extremely distressing, there appears little written on this topic in the scientific literature. A search of the literature only resulted in four publications.

Krissi H, Medina C and Stanton 2003 - “PRE-MENOPAUSAL WOMEN”

Vaginal wind – a new pelvic symptom. *International Urogynaecology Journal*, 2003, vol 14, pp399-402

Presented the patient characteristics, symptoms, physical examination results and treatment outcomes of 6 pre-menopausal women presenting to a uro-gynaecology clinic with a primary complain of vaginal wind.

Patient Characteristics

General

- All six women were **pre-menopausal** at the **time of onset** of symptoms.
- 4 out of 5 women had a **normal BMI**, one was underweight and one overweight.

Patient Number	1	2	3	4	5	6
Age at onset	21	26	27	34	37	52
BMI	15.2	32.2	23.1	24.7	20.4	23.3



Obstetric Histories

- 5 out of 6 women were **parous**, 1 was nulliparous
- 4 (out of 5) indicated **their first vaginal birth** as the **precipitating factor** for onset of symptoms.
- All births were average birth weights,
- There was a relatively normal / expected distribution of vaginal vs instrumental births
- All parous women had experienced either a **perineal tear or episiotomy**.

Patient Number	1	2	3	4	5	6
Parity	1	1	1	3	1	0
Largest Weight	3300	3250	3550	3100	3450	-
Mode of Delivery	NVD	Forceps	Forceps	NVD	NVD	-
Episiotomy / Tear	Tear	Episiotomy	Episiotomy	Tear	Episiotomy	-

Prolapse

There appeared to be a very high rate of rectocele amongst the 6 women (66%), with even the nulliparous female demonstrating posterior vaginal wall prolapse.

Patient Number	1	2	3	4	5	6
PROLAPSE	Rectocele	Rectocele Enterocele Cystocele	Rectocele Cystocele			Rectocele

Pelvic Floor Function

Considering the women were virtually all parous, there was a very high average pelvic floor strength with all women grading 3-5 on a Modified Oxford Scale ("Normal - Strong" on International Continence Society Grading). It could be hypothesised that strong pelvic floor musculature may in fact have an increased ability to "trap" vaginal wind which is then later expelled during forceful manoeuvres??

Patient Number	1	2	3	4	5	6
PELVIC FLOOR STRENGTH (MOS)	3	5	5	3	3	4

Marijke et al (2009)

Vaginal noise: prevalence, bother and risk factors in a general female population aged 45-85 years.
International Urogynaecology Journal, vol 20, pp 905 – 911

A cross-sectional study on the general population.

Questionnaires sent to 2,921 women (aged 45-85years)

→ responded by 1,397 women.

→ N = 800 selected for VE with POP-Q and PF Assessment.

RESULTS

- Vaginal Noise was experienced by 12.8% of the respondents
- 72.8% of those symptomatic of vaginal noise experienced a "little bother"
- Average parity was 2 (P0 = 8.6%, P1 = 15.4%, P2 = 48.3%, P3 = 27.7%)

Comparison of Women with and Without Symptomatic Vaginal Noise (VN)

- **SEXUAL ACTIVITY STATUS** – not associated
 - No difference in rates of VN in Sexually Active (13.3%) and Non-Sexually Active (12.2%)
- **PELVIC FLOOR FUNCTION** – not associated
 - No differences found in Pelvic Floor Strength, Ability to achieve urethral lift or ability to perform the "Knack" between those with and without symptomatic Vaginal Noise.
- **PROLAPSE** – **associated**
 - Significantly greater number of women in the vaginal noise group demonstrated Pelvic Organ Prolapse on vaginal examination (20.9% vs 10.3%)
- **INCONTINENCE** – **associated**
 - Significantly greater number of women in the vaginal noise group suffered Urge Urinary Incontinence (43% vs 27%), Stress Urinary Incontinence (69% vs 52%), Faecal Incontinence – liquid stool (22% vs 11%) and Faecal Incontinence – solid stool (9.2% vs 2.6%)

TREATMENT OF VAGINAL WIND – 3 Publications

1. **Krissi H, Medina C and Stanton 2003 - "PRE-MENOPAUSAL WOMEN"**

Vaginal wind – a new pelvic symptom. *International Urogynaecology Journal*, vol 14, pp399-402

All women were first offered pelvic floor exercises. Some women were then offered either a modified Bard Pessary (similar to a contiform), prolapse surgery or a Fenton's procedure.

PELVIC FLOOR MUSCLE TRAINING / PHYSIOTHERAPY

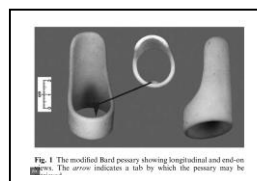
None of the women had improvement in the symptom of vaginal wind with PFMT / physiotherapy.

Patient # →	1	2	3	4	5	6
PELVIC FLOOR EXERCISES	No improvement	No Improvement	No Improvement	No Improvement	No Improvement	No Improvement

MODIFIED BARD PESSARY (similar to contiform)

2 Women Declined Pessary, 4 trialed the pessary

- 2/4 had minimal improvement
- 2/4 were completely cured with the pessary



Patient # →	1	2	3	4	5	6
Bard Pessary	Cured – Completely Asymptomatic	Declined Pessary	Minimal Improvement	Cured – Completely Asymptomatic	Declined Pessary	Minimal Improvement

2. Hsu, Sylvia 2007

Vaginal wind – a treatment option. *International Urogynaecology Journal*, vol 18, p703

Presented a case of a 43yo Chinese woman who complained of vaginal wind symptoms since the age of 31 – a month after her second delivery. Both children had been born by caesarean section. Very Distressed.

Pelvic Floor Muscle training failed to resolve the symptom.

*However..... **Wearing of a Tampon fully resolved the symptom** by preventing air entering the vaginal cavity.*

3. Jeffery, Franco and Fynes 2008

Vaginal wind – the cube pessary as a solution. *International Urogynaecology Journal*, vol 19, p1457

Presented a case of a 55yo woman who complained of vaginal wind. Episodes occurred a few times a day. Vaginal Examination did not demonstrate any prolapse.

- *Pelvic Floor Muscle training failed to resolve the symptom.*
- *Anterior Colporrhaphy (Anterior Repair) failed to resolve the symptom*
- *Ring Pessary was failed to resolve the symptoms*

*However..... **Wearing of a Cube Pessary fully resolved the symptom** by preventing air entering the vaginal cavity.*

TARYN'S SUMMARY

1. Vaginal wind appears to occur in about 10-15% of women, affecting both pre-and post-menopausal women
2. The majority of women appear to only perceive a “little bother”, however for some women the symptom is more severe and is very distressing.
3. Vaginal Wind does not appear to be related to pelvic floor muscle weakness and does not appear to respond to pelvic floor muscle exercises
4. Vaginal Wind does appear related to pelvic organ prolapse, however can occur in the absence of POP
5. Vaginal Wind appears most successfully treated by a vaginal support / space occupying device
 - a. Contiform / Bard Pessary
 - b. Cube Pessary
 - c. Tampon