

## MANAGEMENT OF POLYCYSTIC OVARIAN DISEASE BY AYURVEDIC REGIME WITH SPECIAL REFERENCE TO *ARTAVAKSHAYA* – A CASE REPORT

Monika Kumari<sup>1\*</sup>, Hetal H. Dave<sup>2</sup>, Sonu<sup>3</sup> and Bihani Sanjyal<sup>4</sup>

<sup>1</sup>PG Final Year Scholar, Department of Prasutitantra Evam Striroga, National Institute of Ayurveda, Deemed to be University, Jaipur, Rajasthan – 302002.

<sup>2</sup>Associate Professor, Department of Prasutitantra Evam Striroga, National Institute of Ayurveda, Deemed to be University, Jaipur, Rajasthan - 302002.

<sup>3</sup>Assistant Professor, Department of Prasutitantra Evam Striroga, National Institute of Ayurveda, Deemed to be University, Jaipur, Rajasthan - 302002.

<sup>4</sup>PG Final Year Scholar, Department of Prasutitantra Evam Striroga, National Institute of Ayurveda, Deemed to be University, Jaipur, Rajasthan – 302002.

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### \*Corresponding Author

**Monika Kumari**

PG Final Year Scholar,  
Department of Prasutitantra  
Evam Striroga, National  
Institute of Ayurveda,  
Deemed to be University,  
Jaipur, Rajasthan – 302002.

### ABSTRACT

**Introduction:** The most prevalent endocrinopathy in women of reproductive age is polycystic ovarian disease (PCOD), which is brought on by insulin resistance and the compensatory hyperinsulinemia. This has a negative impact on several organ systems and may lead to infertility, anovulation, irregular uterine hemorrhage, and changes in serum lipids. *Artavakshaya* and PCOS are connected, in Ayurvedic thought. Hereby, reporting a case of 34 year old married female who visited *Prasutitantra* and *Striroga* OPD at National Institute of Ayurveda, Jaipur. **Main Clinical Findings:** Patient presented with the complaints of irregular, scanty and painful menstruation. Ultrasonography dated 15 June 2022 suggested bilateral PCOD. **Diagnosis:** On the basis of these clinical presentations and

ultrasonography findings patient was diagnosed with bilateral PCOD. **Intervention:** Ayurveda focuses on cleansing the *srotas* first followed by oral medications; this facilitates easy absorption of medicine. In present study patient was therefore treated with *shodhana* as well as *shamana* therapy for better results. **Conclusion:** After 3 months of treatment an ultrasound was repeated which showed No significant abnormality is noted.

**KEYWORDS:** Poly Cystic Ovarian Disease, *Artavakshaya*, *Shodhana*, *Shamana*.

## INTRODUCTION

PCOD is nowadays common in women of reproductive age which interfere with the endocrine system along with metabolic, reproductive, mental and psychological health.<sup>[1]</sup> In India only, a study showed prevalence of 3.7 to 22.5 percent depending on the population study criteria.<sup>[2]</sup> Its pathogenesis involves abnormalities in leptin- adiponectin, oxidative stress, and autoimmunity along with gene association in various studies. Diagnosis is made based upon clinical features as well as hormonal assessment and ultrasonography. Major symptoms include menstrual irregularities, obesity and signs of androgen excess like sometimes hirsutism.<sup>[3]</sup> Medical and surgical methods are employed by the contemporary science for the management of PCOD. In allopathic medicine oral contraceptives, progestins, anti-androgens and ovulation induction agents remain standard therapies.<sup>[4]</sup>

It is hard to find direct description of Polycystic ovarian disease in Ayurveda classics. But after studying it in detail it can be compared with *Artavakshaya* according to its clinical features. *Artavakshaya* is a condition in which Pitta as well as Kapha doshas are involved. It is manifested with clinical features like delayed menses i.e menses not occurring timely, scanty menses and painful menses. Dhatus involved in manifestation of *artavakshaya* are *Rasa* and *Meda*, *upadhatu* involved is *Artava* and *Srotas* affected are *Rasa*, *Rakta* and *Artavavaha Srotas*.<sup>[5]</sup> Hence we explain the etiopathogenesis of PCOD on the basis of same *Dosha*, *Dhatu* and *Upadhatu*s involvement. Treatment plan was proposed according the clinical features and *dosha-dushyas* involved in the manifestation of disease.

## CASE REPORT

A female aged 34 years, residence of Jaipur, housewife, married for 12 years, came to NIA OPD with the complaint of irregular and scanty menses for 6-7 months.

### Menstrual History

Age Of Menarche - 13year
LMP - 12-06-2022
Interval – 45-50 Days
Duration - 2days
Pain – Present, she took Tab.Meftalspas frequently.
Clots- Absent
Smell- Absent

Past medical History - Not significant.  
 Past Surgical History - Cholecystectomy was done 7 years back.  
 Family History - Not significant.  
 Allergy History – Not Significant.  
 Drug History – Tab Meftalspas frequently for Dysmenorrhea  
 Obstetric History – G1P1L1A0

### Personal History

Addiction – Tea & Coffee  
 Diet - Vegetarian  
 Appetite - Normal  
 Bowel Habits - Normal  
 Bladder – Normal  
 Sleep – Sound

### General Examinations

Built – Normal  
 Weight - 48 kg  
 Height - 158 cm  
 Pulse rate - 78/min  
 B.P. - 110/80 mm of hg  
 Respiration rate - 18/min  
 Temp. - 98.6°F

Physical examination showed no any systemic abnormality with normal S1 and S2 heart sounds, both lungs clear on auscultation.

Abdominal examination also showed no any organomegaly with normal bowel sounds. Patient didn't show any features of androgen excess like hirsutism, insulin resistance like acanthosis nigricans.

### DIFFERENTIAL DIAGNOSIS

**Ayurvedic:** *Artavakshaya, Vatik artavadushti*

**Modern:** Oligomenorrhea, Premature ovarian failure, Endometriosis, PCOD.

### FINAL DIAGNOSIS

**Ayurvedic** : *Artavakshaya*

**Modern** : PCOD

**PROGNOSIS** (*Sadhyaasadyata*): *Sukha-sadhya*

## TREATMENT GIVEN

### Principles of management



### Treatment schedule given to patient

<i>Chikitsa vyavasta patra</i>	
<b>Nidana Parivarjana:</b> Patient was asked about complete daily routine, dietary habits, exercises and addiction in details and correction was made on her sleep schedule and dietary habits.	
<b>Rajaswala charya:</b> she was advised to follow 3 days rajaswala charya schedule during menses in every cycle.	
She was advised to do regular yoga protocol.	
<b>Yoga basti</b>	<i>Asthapana basti with Dashmool and Erandamoolkwath (500ml)</i> <i>Matra basti with dashmool tail (60ml)</i>
<b>Samana Aushadha</b>	<i>Kanchanar guggulu Gokshura churna Arbudhhara kwath</i>

### Posology

**Yoga basti:** first cycle.

Date	Basti	Retained time	Time of administration	Timing
28/06/22	Matra basti	55 minutes	12:05pm	After meal
29/06/22	Matra basti	1 hour	12:00pm	After meal
30/06/22	Asthapana basti	25 minutes	8:05am	Before meal
1/07/22	Matra basti	1.5 hour	11:45pm	After meal
2/07/22	Asthapana basti	15 minutes	8:15am	Before meal
3/07/22	Matra basti	1 hour	11:55pm	After meal
4/07/22	Asthapana basti	35 minutes	8:10am	Before meal
5/07/22	Matra basti	2 hours	12:10pm	After meal

Second cycle: 21/07/22 to 28/07/22

Third cycle: 16/08/22 to 23/08/22

### Oral Medication

Name	Dose	Frequency	Timing	Duration
<i>Kanchanar guggulu</i>	500mg	Twice daily	After meal	15 days
<i>Arbudhara kwath</i>	20ml	Twice daily	Before meal	15 days
<i>Gokshura churna</i>	3gm	Twice daily	After meal	15 days

## OBSERVATION AND RESULTS

## Changes in Menstrual cycle

Menstrual history	Baseline findings	First visit	Second visit	Third visit
LMP	12/06	15/07	12/08	10/09
Cycle	Irregular	Regular	Regular	Regular
Duration	2 days	2 days		
Interval	45-50 days	33days	28 days	28-30days
Flow	Scanty			
Pain	++	Pain relief	Pain relief	Pain relief
Clots	Absent	Absent	Absent	Absent
Color	Dark red	Red	Red	Red
Smell	Absent			

## first visit

- LMP-12/06/2022
- After one cycle...pain relief

## second visit

- LMP-15/07
- After second cycle...regular cycle, 35 days

## third visit

- LMP -12/08
- After third cycle :
- Symptomatic relief: pain relief, regular cycle of 28-30 days

## Changes in Sonography







**Fig: Sonography image taken before treatment.**

**PERFECT IMAGING AND DIAGNOSTIC CENTRE**  
 Plot No. 1, Grenede Marg, Pratap Nagar, Near Colonel's Foundation Pre School, Khatpura Road,  
 Between H.P. & Bharat Petrol Pump, Jaipur-302012 (Raj.)

Patient Name	SUMAN SHARMA		
Age	34 Yr.	Date	12-Sep-22
Gender	F	REF. By.	DR.HETAL DAVE

**USG PELVIS**

Uterus is normal in size (38X52X79 mm) anteverted position and shows normal shape. No focal lesion is seen in uterus. Myometrial echoes appear normal. Endometrial thickness (6.6 mm) and echoes appear normal.

Right ovary measures –23x16X25 mm vol=5cc, Two developing follicle of size 7x6 mm and 9x7mm are seen

Left ovary measures –20x20x25 mm VOL=5cc, Two developing follicle of size 8x6 mm and 5x5mm are seen.

Urinary bladder is normal in shape, size and wall thickness with smooth walls and no internal echoes.

No free fluid is seen in peritoneal cavity.

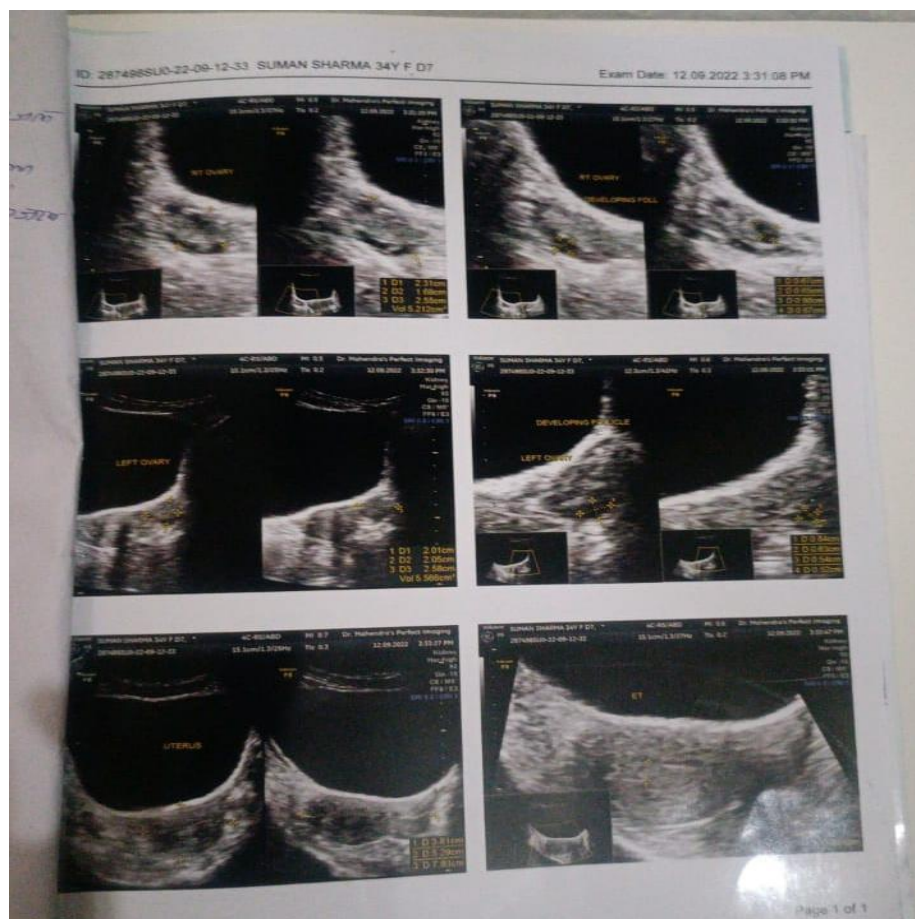
**IMPRESSION:**

- No significant abnormality is noted.

ADV: CORRELATION WITH CLINICAL FINDINGS AND RELEVANT FURTHER INVESTIGATION

Dr. Mahendra K. Dhaka  
 MD, Consultant Radiologist  
 Regn. No. 029032

DR. Mahendra K Dhaka  
 MD (Radio-Diagnosis)  
 (Consultant Radiologist)



**Fig: Sonography image taken after treatment.**

### ADVERSE EFFECTS

No adverse effects of any given drug were observed in the patient.

### DISCUSSION

Polycystic Ovarian Disease is one of the most common causes of Menstrual irregularities and female infertility. It has been linked to anovulation, androgen excess, obesity, and infertility. PCOD raises free testosterone, ovarian androgen secretion, free estradiol, and estrone levels. It promotes LH secretion and steady-state follicle stimulating hormone levels, both of which have an effect on follicular maturation. This hyperandrogenic, norm estrogenic environment causes anovulation because no progesterone is available to disrupt the endometrium's constant estrogen stimulation. Oral contraception, progestins, anti-androgens, and ovulation induction agents are still standard treatments in allopathic medicine.<sup>[6]</sup>

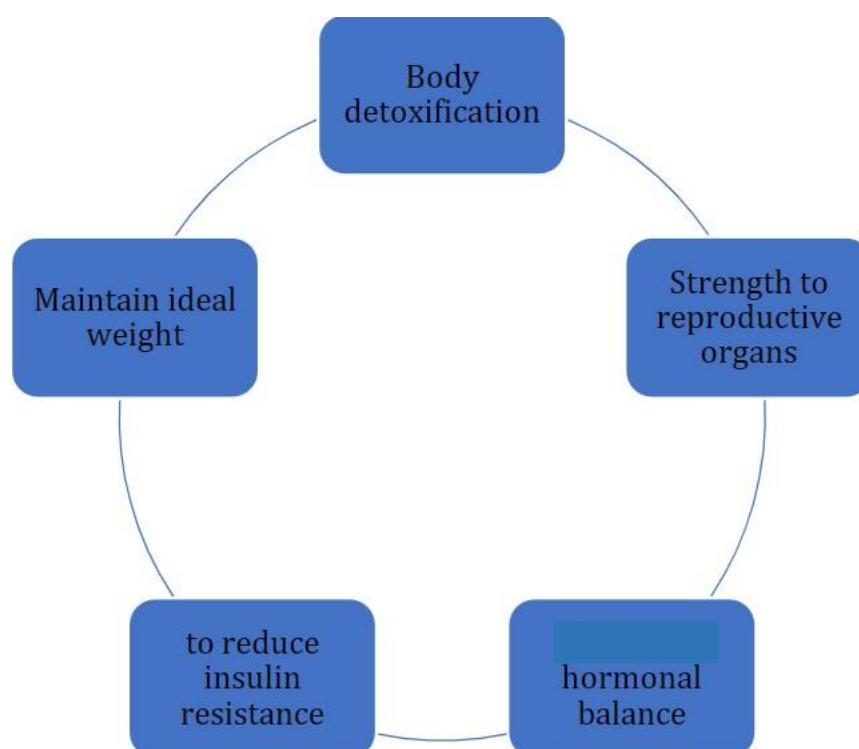
Poly Cystic Ovarian Disease can be described using the same *Dosha*, *Dhatu* and *Upadhatu* components. Increased weight, infertility, hirsutism, diabetic tendencies, and coldness are symptoms of *Kapha* dominance. Hair loss, acne, difficult menstrual cycles, blood clots, and

heart issues are all signs of a *Pitta* dominance. Menstruation pain, a lack of menstrual blood, and severe menstrual irregularities are signs of *vata* dominance.<sup>[7]</sup>

Treatment principle according to *Acharya Sushruta* is *samsodhana*<sup>[8]</sup> followed by *samshamana*. In *Charaka siddhithana*, it is mentioned that diseases that originate in *shakha* (peripheral tissues), *koshtha* (visceral organs), *marma* (vital points of the body), *urdhva* (upper part of body), *sarvaya* (covering entire body), and *anga* are caused by *vata* (individual parts of the body). *Vata* is in charge of the separation and combination of stool, urine, *pitta*, and other excreta as well as tissue elements. When it becomes extremely aggravated, the only solution is *Basti*.<sup>[9]</sup> As a result, physicians regard *Basti* as half of the total therapeutics. Some doctors even consider it to be the entirety of therapeutics. So, for *artavakshaya* condition, *vata* is sole responsible factors, *Apana dushti* is consequence. *Basti* is best choice of treatment for this condition.

### Mechanism of action of Basti in PCOD

*Guda* (Anus) is considered as *Sharira mulam* since it has *shiras* and *dhamanis* spreading all over the body.<sup>[10]</sup> *Basti dravya* normalizes *Apana Vata* leading to normal *raja pravritti* and normal *Beja nirmana*.<sup>[11]</sup>



**Figure 1** Basti Chikitsa in PCOD Includes Following Goals

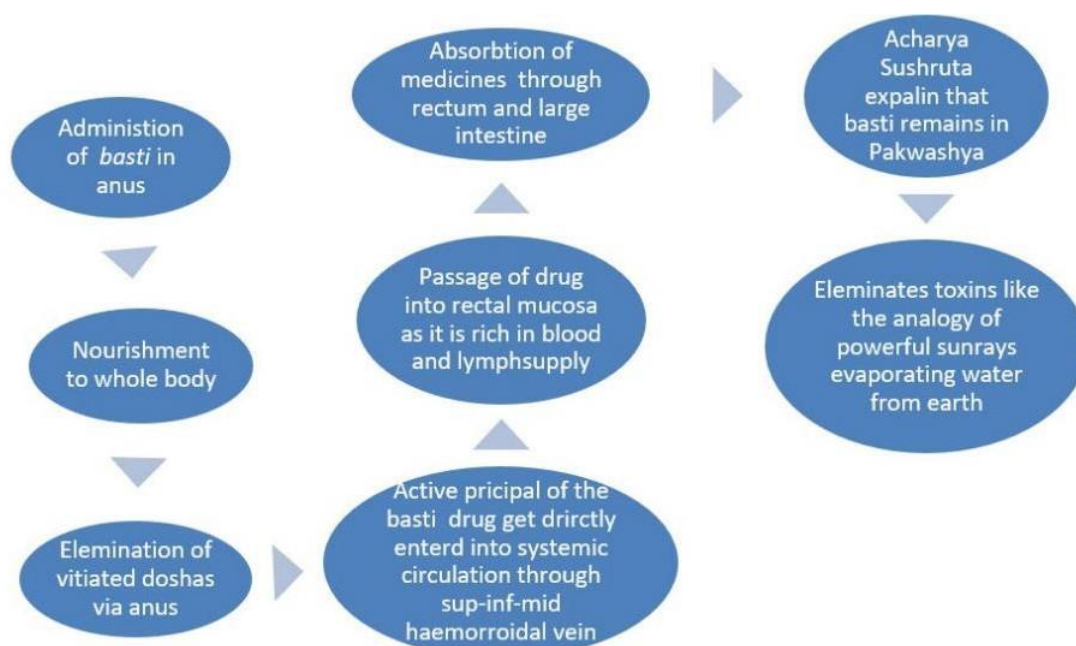


Source<sup>[12]</sup>

[https://www.researchgate.net/publication/365516050\\_ROLE\\_OF\\_BASTI\\_IN\\_THE\\_MANAGEMENT\\_OF\\_PCOD\\_ARTAVAVYAPAD](https://www.researchgate.net/publication/365516050_ROLE_OF_BASTI_IN_THE_MANAGEMENT_OF_PCOD_ARTAVAVYAPAD)

According to current research, any drug administered via rectal route absorbs through the mucosal layer of the rectum and enters the systemic circulation. Basti stimulates the Enteric Nervous System (ENS) and generates stimulatory signals for the Central Nervous System (CNS) as it enters the Gastro Intestinal Tract.<sup>[13 14]</sup> These signals activate endogenous opioids in the GIT, primarily  $\mu$ -endorphin, which inhibits gonadotropin-releasing hormone release.<sup>[15]</sup>

*Basti* in PCOD patients regulates the Hypothalamic-Pituitary-Ovary axis, resulting in normalization of the ovarian cycle as well as the menstrual cycle. *Apana Vata* function could be attributed to parasympathetic activity. Basti is introduced through the rectum and may stimulate the parasympathetic nerve supply, which aids in the development of follicles and the release of ovum from the ovary.



**Figure 2** Pharmacodynamics of Basti

Source:

[https://www.researchgate.net/publication/365516050\\_ROLE\\_OF\\_BASTI\\_IN\\_THE\\_MANAGEMENT\\_OF\\_PCOD\\_ARTAVAVYAPAD](https://www.researchgate.net/publication/365516050_ROLE_OF_BASTI_IN_THE_MANAGEMENT_OF_PCOD_ARTAVAVYAPAD).



Figure 3 Systemic Action of the Basti

### Action of basti dravya

**Dashmool:** As *Tridosahara*, *Vedana sthapak*, *Sroto Shodhaka*, *Deepana*, *Anulomana*, *Shothghana* and *Shoolghana* properties *Dashamula* provides relief from PCOD's symptoms and signs of sickness while also destroying the disease's *Samprapti* (pathogenesis).<sup>[16]</sup> Also anti-inflammatory, analgesic, and antipyretic properties of *dashamoola* have been proven.<sup>[17]</sup>

**Erandamool kwath:** *Niruha Basti Erandmuladi* this includes 34 medications, including the greatest number of *Dravyas* to *Ushna Veerya*, which is indicated in the *Shoola* of the *Jangha*, *Uru*, *Paada*, and *Pristha* region as well as in *Kapha-avruta* circumstances.

### Action of Samsamana dravya

#### *Kanchanara guggulu*

*Granthihara*, *vatakapha shamak*, *artavjanan*<sup>[18,19]</sup>, breakdown the pathology of of *kaphaj granthi*, *lekhan* and *vatahara property*<sup>[20]</sup>, *sothahara*(anti-inflammatory), cytotoxic effect by inhibiting cell division and reducing cell proliferation.

Studies demonstrated antidiabetic, anti-oxidant, analgesic, anti-dyslipidemia, anti-inflammatory, anti-microbial, cytotoxic and many more properties of *B. variegata*.<sup>[21]</sup>

#### *Gokshura churna*

*Gokshura* (*Tribulus terrestris*) in *bhavpraksah nighantu* is mentioned as *Deepana*, *vrishya*, *pramehara*<sup>[22]</sup> along with other various properties. Unani system of medicine mostly recommend it in case of painful menstruation and any uterine disorders where decoction of fruit is used in regularizing menstruation and treat infertility.<sup>[23]</sup> It also possesses anti-urolithiatic, aphrodisiac, cns stimulatory and cardiotonic activities.<sup>[24]</sup>

A research study on the effects of *Tribulus terrestris* extract on the ovarian activity of young Wistar rats was conducted. Because *Tribulus terrestris* extract stimulates the growth and development of the corpus luteum, it also exhibits the beginning of puberty due to its LH-like

activity.<sup>[25]</sup> Another study shows *Tribulus terrestris* fruit and aerial parts encourage regular ovulation and may lessen ovarian cysts in PCOS patients.<sup>[26]</sup>

### ***Arbudhhara kwath***

It is ayurvedic proprietary medicine, of NIA formulary consisting *shigru*, *varuna*, *kanchanar* and *haridra* indicated mainly for *arbudh*, *granthi*, *gulma*.<sup>[27]</sup>

### **LIMITATIONS**

Being a single case study it is difficult to propose that this can be applied as universal treatment for Artavakshaya. More such studies and case series need to be conducted to establish a standard treatment protocol for same.

### **CONCLUSION**

Although *Vata* and *Kapha Avarana* are the primary causes of PCOS, *Pitta Vardhan*, *Aamapachana*, and *Artava Janana Chikitsa* are also beneficial. This polycystic ovarian disease treatment plan is being offered as a result. All of these medications has characteristics that make it simple to reduce PCOD symptoms.

### **DECLARATION OF PATIENT CONSENT**

Informed oral consent was taken. The patient gave consent for clinical information to be reported in the journal. The patient understands that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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**CONFLICT OF INTEREST:** The authors declare no conflict of interests.

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