# Missing from the Metrics: Navigating Symptom Fluctuations in Hypopara Care for Women



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Hypoparathyroidism (hypopara) is a rare endocrine disorder that disproportionately affects women, making up about 70 – 80% of cases. 1,2,3 Within this group, a notable proportion are younger women of reproductive age, for whom the condition brings additional layers of clinical and personal complexity. 2,3 Fertility, pregnancy and lactation can all impact hypopara management and require careful coordination between patients and their healthcare team. 3 As a result, hypopara care often extends beyond routine biochemical monitoring, and encompasses emotional, social and practical dimensions as well.

In routine clinical practice, the management of hypopara relies heavily on patient-reported symptoms and self-described quality of life, typically captured during a consultation. In my weekly parathyroid clinic, most patients are reviewed approximately every six months, at which time biochemical measurements such as serum calcium are assessed alongside a discussion of symptoms.4 While this model provides valuable insights, by design it typically offers only a static 'snapshot' of disease control. With this approach, the frequent and unpredictable fluctuations in symptoms that people with hypopara may experience on a daily basis can be difficult to fully capture. This highlights an important opportunity to develop more responsive and patient-centred approaches to care that can better reflect the day-to-day realities of women living with this condition.

#### **Challenges in Treatment and Monitoring**

For women in particular, with certain stages of life, such as pregnancy, the postpartum period and perimenopause, come additional considerations that can add complexity to the management of hypopara care.

#### **Pregnancy and Postpartum Care**

Normal physiological changes that take place during pregnancy and breastfeeding, along with evolving calcium requirements, provide an additional challenge for maintaining acceptable serum calcium levels in women with hypopara. Although the majority of women with hypopara go on to have healthy pregnancies and children, inadequately controlled serum calcium levels can pose risk to both mother and child.<sup>2</sup> Severe maternal hypocalcaemia or hypercalcaemia during pregnancy may lead to complications, including foetal loss, restricted foetal growth, pre-term delivery and/or hypo-/hypercalcaemia in the newborn.<sup>2,4,5</sup> Therefore, the management of hypopara during this period often requires even more regular monitoring, sometimes on a weekly, or fortnightly basis.2,4,5

To ensure continuity of care, it is critical that all healthcare professionals involved in maternity care, including obstetricians, midwives and general practitioners, are aware of the continuous monitoring requirements for women with hypopara. <sup>2,5</sup> Healthcare professionals should also communicate these risks clearly and sensitively to patients, encouraging them to better understand their condition and empower them to self-manage as best they can.

#### Perimenopause

Although menopause itself does not directly affect calcium regulation, the perimenopausal period is characterised by fluctuating sex hormone levels, particularly oestrogen. These fluctuations can generate symptoms such as fatigue, muscle aches, mood instability and cognitive difficulties, which closely overlap with the symptom profile of hypopara. For patients already navigating hypopara, this overlap creates ambiguity and may obscure the underlying cause of new or worsening symptoms. As a result, differentiating between perimenopausal changes and hypopara-related

symptom manifestations can be challenging for both patients and clinicians. This often necessitates a more nuanced and collaborative approach to management.

Social, Emotional and Practical Dimensions of Care Beyond the physiological challenges, the demands of treatment and monitoring may place a considerable burden on daily life. The patients I see are required to take tablets at frequent intervals every day, including calcium and active vitamin D. Furthermore, they must dedicate time to attend regular consultations, undergo blood tests and discuss their symptoms – with the impact of this routine varying greatly. Employment obligations, caregiving responsibilities, financial constraints, and language or cultural barriers can all shape how easily someone with hypopara can engage with care. These factors may influence not only adherence to monitoring schedules but also the openness with which patients communicate their experiences during consultations.

## Improved Understanding of the Hypopara Experience

One of the challenges in the clinical management of hypopara is that routine assessment methods can be limited in their ability to reflect the full lived experience of patients. For all patients, not just women, biannual serum calcium measurements can fall within the target range, yet the patient may continue to experience fatigue, muscle cramps and cognitive difficulties which have a significant effect on their daily lives.9 For women, hormonal fluctuations - such as those associated with menstrual cycles - may further influence symptom patterns, although additional research is needed to identify if there is a causal link. 10,11 However, this disconnect between biochemical 'control' and symptomatic burden highlights the need for tools that capture a more dynamic picture of the condition.

A promising approach could lie in the development of structured patient tools, such as digital or paper-based 'trackers' that allow individuals to log symptoms in real time, in relation to medication timing and symptom experiences. By linking reported symptoms to dosage schedules, such tools could bring to light patterns that are not easily visible during biannual consultations.

### The potential benefit of a structured symptom tracker I believe are threefold:

- 1. Identify patterns and potential triggers. For example, whether symptoms appear at particular times of day, or in relation to stress, menstrual cycles, or other hormonal changes.
- 2. Support patient self-management by increasing awareness of how adjustments in calcium may influence symptom severity. Over time, this could foster a greater sense of agency and partnership in care between the person living with hypopara and their HCPs.
- For clinicians, the data provides a richer, longitudinal picture that extends beyond the 'snapshot' view afforded by routine blood tests. This contextual information may guide more nuanced treatment decisions.

For patients with hypopara, biochemical stability recorded at a consultation does not always equate to well-being. Integrating patient-reported data into care offers an opportunity to move towards a model of care that is both evidence-based and patient-centric. When the patient experience is placed at the forefront, these tools can strengthen dialogue, ground consultations in meaningful, patient-generated data to foster more collaborative discussions that validate the day-to-day symptoms a person living with hypopara experiences.



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- <sup>1</sup> Bollerslev et al. European Society of Endocrinology Clinical Guideline: Treatment of chronic hypoparathyroidism in adults. Eur J Endocrinol. 2015 Aug;173(2):G1-20.
- <sup>2</sup> PARAT 2024: Workshop on Parathyroid Disorders: What Has Happened Since the Pandemic and Further Perspectives. Bristol. European Society of Endocrinology; 2024.
- <sup>3</sup> Powers J, Joy K, Ruscio A, Lagast H. Prevalence and incidence of hypoparathyroidism in the United States using a large claims database. J Bone Miner Res. 2013 Dec;28(12):2570-6. doi: 10.1002/jbmr.2004. PMID: 23737456.
- <sup>4</sup> Bollerslev et al. European expert consensus on practical management of specific aspects of parathyroid disorders in adults and in pregnancy: Recommendations of the ESE Educational Program on Parathyroid Disorders (PARAT 2021). Eur J Endocrinol. 2022;186(2):R-33-R63.
- Recommendations of the ESE Educational Program on Parathyroid Disorders (PARAL 2021). Eur J Endocrinol. 2022;186(2):R-33-R63.

  Hatswell BL at al. Management of hypoparathyroidism in pregnancy and lactation A report of 10 cases. Bone reports. 2015 Jun;3:15-19.
- <sup>6</sup>Yang JL et al. Estrogen deficiency in the menopause and the role of hormone therapy: integrating the findings of basic science research with clinical trials. Menopause. 2024;31(10):926-939.
- <sup>7</sup> NHS. Menopause-Symtoms. NHS website. Published May 2022. Available from: https://www.nhs.uk/conditions/menopause/symptoms/. Accessed August 2025.
- <sup>8</sup> Brod M et al. Living with hypoparathyroidism: development of the Hypoparathyroidism Patient Experience Scale-Impact (HPES-Impact). Qual Life Res. 2021. Jan;30(1):277-291, doi: 10.1007/s11136-020-02607-1. Epub 2020 Aug 24. PMID: 32833143; PMCID: PMC7847873.
- <sup>9</sup> Khan A et al. Evaluation and Management of Hypoparathyroidim Summary Statement and Guidelines from the Second International Workshop. Journal of Bone and Mineral Research. 2022 Dec;37(12):2568-85.
- <sup>10</sup> Mirnaya S. Mensus-associated decline of serum calcium in hypoparathyroid women. Endocrine Abstracts. 2023 May 90 EP168.
- <sup>11</sup> Saha, S., Goswami, R. Menstruation associated hypocalcemic symptoms and serum calcium in patients with idiopathic hypoparathyroidism. BMC Endocr Disord 14, 28 (2014). https://doi.org/10.1186/1472-6823-14-28.