

Fatigue in Women

A Pathological Perspective



Fatigue has been recognised in medical practice for centuries. Initially regarded as a vague symptom often attributed to “neurasthenia”,¹ it was historically considered a minor complaint influenced by societal norms. Consequently, fatigue was frequently dismissed and underestimated. Unexplained fatigue is the most common unexplained complaint presenting in general practice and is acknowledged as a symptom indicative of various psychological and physical conditions, from depression to chronic fatigue syndrome and thyroid disorders.²

Despite its prevalence—reported more commonly in women due to factors like menstrual cycles, pregnancy, and iron deficiency anaemia—fatigue often suffers from a lack of serious consideration in both the community and healthcare settings. This is compounded by a gender bias that sometimes leads to women’s symptoms being taken less seriously, potentially delaying crucial diagnosis and treatment.

This introduction sets the stage for a discussion on the modern investigation of fatigue in women, highlighting the need for greater recognition and a systematic approach in medical diagnostics to improve outcomes for those affected.

Diagnostic approach to fatigue in women:

Thyroid function tests

Thyroid dysfunction, particularly hypothyroidism and less commonly hyperthyroidism, can significantly impact energy levels. These conditions can lead to fatigue when the thyroid gland either produces too little or too much thyroid hormone. Testing TSH and free T4 helps to diagnose these conditions, which are manageable through hormonal therapies.

Glucose levels

Fatigue can be a symptom of both diabetes and pre-diabetes, where the body struggles with insulin regulation leading to abnormal glucose levels. Early detection through fasting glucose tests or HbA1c measurements can guide interventions that may alleviate fatigue and manage the underlying metabolic dysfunction.

Full Blood Examination (FBE)

This test can detect a variety of conditions that may cause fatigue. Iron-deficiency anaemia is a common finding, particularly where there is chronic blood loss such as in heavy menstrual periods or gastrointestinal bleeding. FBE can also identify other forms of anaemia caused by vitamin deficiencies or chronic diseases, and less commonly, haematologic malignancies.

Iron studies

Besides iron-deficiency anaemia, iron overload disorders like haemochromatosis can also cause fatigue. This test measures ferritin and transferrin saturation, which can guide appropriate treatment strategies, such as dietary adjustments, iron supplementation, or investigation for causes of increased iron stores.

Vitamin B12 and folate levels

Deficiency in either of these vitamins can lead to megaloblastic anaemia, characterised by the production of abnormally large red blood cells that are inefficient at oxygen transport, resulting in fatigue. Causes include poor dietary intake, malabsorption conditions like coeliac disease, or intrinsic factor deficiency leading to pernicious anaemia.

Vitamin D levels

Deficiency in vitamin D is linked not only to musculoskeletal pain and weakness but also to chronic fatigue. This nutrient is pivotal for bone health and immune function, and deficiency can be due to inadequate sunlight exposure, poor dietary intake, or malabsorption disorders.

References

1. Beard, G., Neurasthenia, or nervous exhaustion. *The Boston Medical and Surgical Journal*, 1869. 80(13): p. 217-221.
2. Koch, H., et al., Demographic characteristics and quality of life of patients with unexplained complaints: a descriptive study in general practice. *Quality of Life Research*, 2007. 16: p. 1483-1489.



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Fatigue in Women

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- Full Blood Examination
- Glucose - Serum (BSL)
- Iron Studies
- Thyroid Function Tests
- Vitamin D (25 Hydroxy)



For further information on MBS guidelines for B12 testing, view Assoc. Prof. Chris Barnes' article "Choosing between vitamin B12 and active B12 testing" by scanning the QR code.

About the author:



Assoc. Prof. Chris Barnes

MBBS FRACP FRCPA

Lab: Clayton (Vic)

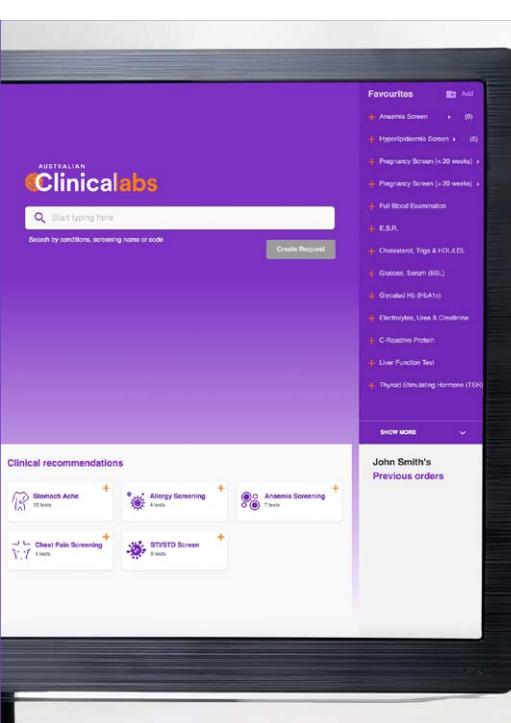
Speciality: Haematology

Areas of Interest: Paediatric haematology, non-malignant haematological conditions including thrombosis and bleeding disorders

Phone: (03) 9538 6777

Email: chris.barnes@clinicallabs.com.au

Associate Professor Chris Barnes is the National Director of Haematology and provides strategic direction for haematology at Clinical Labs on a national level. He is a clinical and laboratory-trained haematologist who has been part of Melbourne Haematology and has worked with Clinical Labs (and previously Healthscope) for several years. A/Prof Barnes is also the director of the Haemophilia Treatment Centre at the Royal Children's Hospital, and has experience in management and leadership positions. He has an active clinical research interest and serves as the director of both Melbourne Haematology (Clinical) and Melbourne Paediatric Specialists.



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