

Sweats

Presentation

The symptom of sweating is a common non specific complaint which may be of no pathological consequence. A serious underlying illness should be suspected when no obvious cause is apparent from the history, the sweats occur at night and are drenching in nature requiring the changing of bed sheets, they persist for more than one month or they are associated with systemic symptoms (fever > 38°C or weight loss > 10%).

Haematological malignancies are a rare cause of night sweats. These cases are usually associated with an abnormal blood count or additional clinical signs and symptoms of haematological malignancy. Isolated sweats in the absence of abnormal blood tests, clinical examination or systemic symptoms are unlikely to indicate an underlying haematological malignancy.

Causes

It has a wide differential diagnosis and can be a feature of endocrine disturbance, infection, inflammatory conditions and malignancy. It can also relate to drugs, both prescribed and recreational.

Non-haematological	Endocrine	Low oestrogen levels (menopause), Low testosterone levels, Thyrotoxicosis, Hypoglycaemia
	Infection	e.g. tuberculosis, infective endocarditis, pyogenic abscess, HIV, glandular fever, osteomyelitis, fungal.
	Autoimmune	eg. SLE, polymyalgia rheumatica
	Alcohol / drugs	eg. cocaine, cannabis, opiates
	Medications	eg. antidepressants, oral hypoglycaemics, steroids, opiates, non steroidal anti-inflammatory medications, hormone receptor antagonists
	Tumours	eg. oat cell carcinoma, mesothelioma, carcinoid, pheochromocytoma
	Neurological	eg. syringomyelia, autonomic neuropathy
	Others	Anxiety, Hyperhidrosis, Gastro-oesophageal reflux disease, Obstructive sleep apnoea.
Haematological	Myeloproliferative disorder	Association: Abnormal FBC and film: Raised Hb and/ or leucocytosis/ and or thrombocytosis OR leuco-erythroblastic blood film. Pruritis may be a feature.
	Low grade lymphoproliferative disorder	Association: Abnormal FBC and film: Lymphocytosis
	Lymphoma	Lymphadenopathy and/ or hepatosplenomegaly and/ or systemic symptoms. *Sweats are a feature of advanced disease usually relating to tumour bulk.

History

- Clinical history including drug history, menstrual history, family history, travel history, occupational history, animal exposure, sleep history
- Assess for localising symptoms of infection and symptoms of inflammatory and malignant disorders including cough, haemoptysis, abdominal pain, diarrhoea, arthralgia, pruritis
- Assess for presence of systemic symptoms: fever > 38°C, weight loss > 10%

Symptoms and Signs

- Baseline observations including blood pressure, pulse, temperature.
- Assess for lymphadenopathy, hepatosplenomegaly, tremor, heart murmur, splinter haemorrhages, localising signs of infection, skin rash, joint swelling.

Investigations

Investigations should be guided by the history and examination findings

<u>Initial Investigations</u>	<u>Investigations to consider</u>
FBC and blood film	Oestrogen/ Testosterone / LH /FSH / cortisol /5-HIAA / catecholamines / prolactin
ESR/ CRP	Bacterial cultures: MSU/ Sputum / Stool/ Blood
U+E/LFT	HIV, Hepatitis B/C, EBV, CMV
Glucose/ HbA1c	ANA, antiphospholipid antibodies
TFT	TB / Brucella / toxoplasmosis /bartonella/lyme/brucella serology
CXR	Serum Igs/ protein electrophoresis

Referral

- Drenching night sweats in combination with systemic symptoms (fever > 38°C, weight loss > 10%) and/ or lymphadenopathy and/ or hepatosplenomegaly : see 2 week wait referral guidelines
- Drenching night sweats in combination with abnormal blood count and film suggestive of myeloproliferative disorder: routine referral
- Drenching night sweats in combination with abnormal blood count and film suggestive of low grade lymphoproliferative disorder: routine referral.

References

A.Viera, M Bond, S Yates: Diagnosing night sweats Am Fam Physician 2003 Mar 1; 67 (5): 1019-1024.