Number 7

CORE TUTORIALS IN DERMATOLOGY FOR PRIMARY CARE

# PDP SELF-TEST QUESTIONNAIRE

# URTICARIA AND RELATED ALLERGIC DISORDERS

NETTLE – *URTICA URENS*

UPDATED PDP SELF-TEST QUESTIONNAIRE APRIL 2023

'Weals or wheals' **are raised white areas on the skin with reddened margins, which may result from sharp blows, or may be a symptom of nettle-rash**

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# PDP SELF-TEST QUESTIONNAIRE

## INTRODUCTION

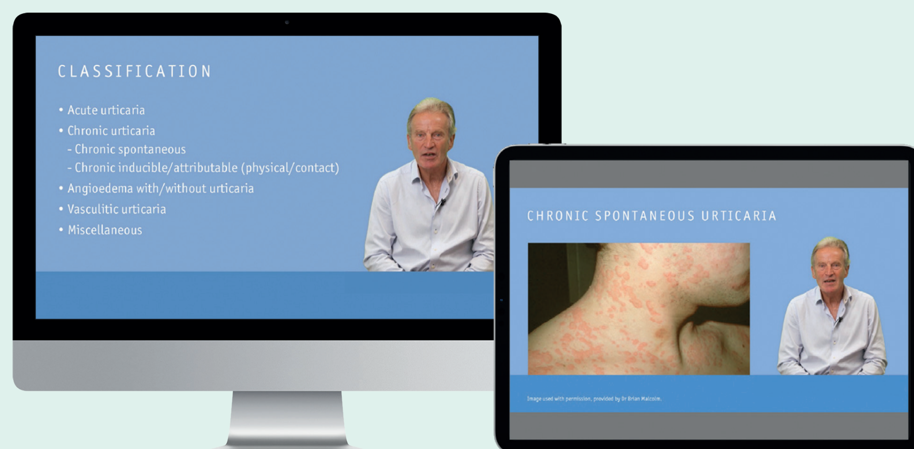
This 'self-test questionnaire' has been written by Dr Brian Malcolm, based on the updated (2022) Chapter 7 "Urticaria" of the Core Tutorials in Dermatology for Primary Care. This revised Chapter can be ordered from Dermal at the address below. Alternatively, the Chapter is available to download from the Dermal website - www.dermal.co.uk, within the Healthcare Professionals Core Tutorials in Dermatology section.

## DERMAL RESOURCES

For 60 years Dermal has focused on researching and developing innovative dermatological treatments. In addition, Dermal has developed an extensive range of educational resources to assist healthcare professionals and patients. These can be found on the Dermal website - www.dermal.co.uk. Our Healthcare Professionals section of the website contains a variety of information and educational materials, such as information about our range of products, resources for healthcare professionals and patients, the Core Tutorials in Dermatology series and links to useful external websites.

The Core Tutorials in Dermatology series are also available as engaging webinars, to complement the written Chapters. These can also be found on the Dermal website.

The webinar on Urticaria provides a useful overview of the topic including assessment, differential diagnosis, treatment options and referral criteria.

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## QUESTIONS

1. What is the definition of 'chronic urticaria'?

2. What is an individual's lifetime risk of having an episode of urticaria?

3. How soon after sun exposure does the rash of solar urticaria characteristically appear?

4. What percentage of the natural population demonstrate the phenomenon of 'dermographism'?

5. Name 3 classes of drugs most commonly implicated in the causation of urticaria.

6. How often is a cause established for Chronic Spontaneous Urticaria?

7. Is prednisolone a useful treatment for standard urticaria?

8. What type of immune reaction is usual in urticaria?

9. In food induced urticaria, what foodstuff is known to cross react with avocado?

10. Which 2 types of urticarial rash are recognised to persist for longer than 24 hours?

11. What did I find useful about the learning module on ‘Urticaria and related allergic disorders’?

12. Having reflected on this module, how might my practice change in managing urticaria and related allergic disorders?

*Ref page 8* "My normal practice is to introduce a non-sedating antihistamine and increase the dose according to response with the exception of mizolastine which is not suitable for up-dosing. It is common dermatological practice to use 2, 3 and even a maximum of 4 times the recommended doses of antihistamines for resistant cases of urticaria, although there are some contraindications for certain categories of patient and these should always be checked by the prescriber. Sedating antihistamines should be used with caution if there is a history of BPH, urinary retention or angle closure glaucoma.

Cetirizine has the shortest time to reach maximum concentrations in the body which can be theoretically advantageous in order to achieve rapid symptom control.

If there is failure to control symptoms, then switching to a different brand and titrating the dose again, can be useful. If again this fails, then consideration of second line drugs/treatments listed below should be considered.

**Prednisolone** – This can be useful in special situations e.g. severe angioedema and delayed pressure urticaria and selectively for episodes of disabling acute urticaria, but should **not** be used routinely or as a long term strategy."

**QUESTION 8.** Answer: Type I immediate hypersensitivity reactions
*Ref page 3* "**1. ACUTE URTICARIA** – Affected individuals are much more likely to have an atopic background. Many will have raised IgE levels and causation is much more likely identifiable, although this can still only be established in less than 50% of cases. IgE mediated food allergy is extremely rare as a cause of chronic urticaria. Commonest aetiologies are Type I immediate hypersensitivity allergic food reactions and also drug reactions."

**QUESTION 9.** Answer: Kiwi Fruit
*Ref page 3* "Acute contact urticaria can be mediated both via immune and non-immune mechanisms (i.e. without prior sensitisation). Foods have already been discussed. Other possible causes are plant, animal and chemical contacts, e.g. latex. Such reactions can be differentiated from contact dermatitis by the short time scale with reactions occurring between a few minutes and one hour. There is also the lack of skin scaling so characteristic of an eczematous reaction. Certain foods can also demonstrate cross reactivity e.g. kiwi and avocado."

**QUESTION 10.** Answer: Urticarial vasculitis and Pressure/delayed pressure urticaria
*Ref page 6* "**5. URTICARIAL VASCULITIS** – The literature suggests that this comprises up to 5% of chronic urticaria; however, it is not widely recognised in primary care. There are some clear indicators in the history, most importantly the urticarial lesions will often persist in excess of 24 hours and last frequently for several days."

Ref page 4 "3. **PHYSICAL URTICARIAS** – aka INDUCIBLE / ATTRIBUTABLE URTICARIA – These comprise approximately 20% of all urticarias. A wide range of differing physical stimuli are implicated and confirmation is by provocative testing. Most common of the physical urticarias is the cholinergic variety – small, intensely itchy, monomorphic urticariated papules, less than 0.5 cm, which appear after episodes of exercise or emotional stress.

Other physical urticarias are listed below.
**Pressure/delayed pressure urticaria** – can occur between 30 minutes and 9 hours after provocation; one of the few urticarias that can last in excess of 24 hours."

## ANSWERS

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**QUESTION 1.** Answer: Urticarial rashes lasting in excess of 6 weeks
*Ref page 4* **"CHRONIC URTICARIA** – Defined as recurrent or persistent urticarial rashes lasting in excess of six weeks. This has been variously titled ordinary urticaria and chronic idiopathic urticaria but the current correct term is chronic spontaneous urticaria (CSU). Cause is rarely established (2-4%) and the majority are now considered to be autoimmune mediated. Autoantibodies can be identified in a third of cases. Foods and additives are rarely implicated;[4] a history of atopy less likely and IgE levels are usually normal. Unless dictated otherwise by history, investigations should be kept to a minimum; this is discussed further on page 6. The physician should be optimistic and upbeat regarding prognosis; 50% self resolve within six months. However, 10% can persist for over ten years!"

**QUESTION 2.** Answer: Acute urticaria is 20%, chronic urticaria is 2-3%
*Ref page 1* "Like all allergy related disease, it is irrefutable that the urticarias are on the increase. Reasons for this remain unclear and are likely multifactorial. Statistically, however, the lifetime risk of suffering from acute urticaria is around 20%[1] and that of chronic urticaria 2-3%.[2] Quality of life assessments demonstrate significant impacts on both objective functioning and subjective well-being, scoring urticaria highly, equating with severe eczema and coronary heart disease and indeed higher than psoriasis."

**QUESTION 3.** Answer: Within minutes
*Ref page 4* "**Solar urticaria** – can be differentiated from other types of sun-induced dermatoses by its sudden onset within minutes of exposure, with symptoms lasting several hours."

**QUESTION 4.** Answer: 5%
*Ref page 5* "**Dermographism** – Literally "writing on the skin". This can be a feature in a wide range of urticarias but can be induced in 5% of the normal population."

**QUESTION 5.** Answer: Any 3 out of 4: Antibiotics/Analgesics/Anti-inflammatories/ACE inhibitors
*Ref page 3* "Commonest aetiologies are Type I immediate hypersensitivity allergic food reactions and also drug reactions.
Most commonly implicated drugs are:

- Antibiotics
- Codeine
- ACE inhibitors
- Aspirin
- Morphine
- NSAIDs"

**QUESTION 6.** Answer: 2-4%
*Ref page 4* "**CHRONIC URTICARIA** – Defined as recurrent or persistent urticarial rashes lasting in excess of six weeks. This has been variously titled ordinary urticaria and chronic idiopathic urticaria but the current correct term is chronic spontaneous urticaria (CSU). Cause is rarely established (2-4%) and the majority are now considered to be autoimmune mediated. Autoantibodies can be identified in a third of cases. Foods and additives are rarely implicated;[4] a history of atopy less likely and IgE levels are usually normal."

**QUESTION 7.** Answer: No
*Ref page 7* "The fundamental cornerstone for the treatment of all urticarias are antihistamines. Pharmacokinetically, these act as mast cell stabilisers. Certain types of urticaria may require additional specific approaches. Topical antihistamines/steroids are **not** of use. Likewise, courses of oral steroids for the majority of acute/chronic urticaria, although frequently prescribed, are not appropriate. Certain exceptions are discussed on page 8."