

# Aquagenic Urticaria

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## Key Points

- A rare disease of physical urticaria which develops on exposure to water
- Most common in females after puberty.

Imagine the torture and agony you will face every time if you had a walk in rain, each time you drink water, whenever you work out. Visualize life without steamy and cold splashes it is gut-wrenching. Every time you do anything mentioned above you will experience the sting of itchy red welts that's what called Aquagenic urticaria also called water allergy or water itch.

Aquagenic urticaria (water allergy) was first reported in 1969 by Shelly and Rawnsley. It is some time described as allergy but it is not a genuine histamine releasing allergic reaction. It is a rare disease of physical urticaria in which prickling and tingling red large bumps or hives appear on the skin, chest, abdomen etc. with clearly defined edges when exposed to water regardless of its temperature even snow, sweat, rain and tears are included.<sup>1</sup>

## Signs and symptoms:

Hives

Welts (wheals) which last for 30 mins to 2 hours

Aquadynia and Scratchy feeling.<sup>2</sup>

## Cause:

The cause of this disease is still unknown, but some theories have been put forward that an allergen or chemical in water is responsible or another theory that the water reacts with some chemicals on skin as a result histamine is released.

## Diagnosis:

It is most common in females after puberty. The confirmation of aquagenic urticaria may be done through water challenge test.<sup>3</sup> This involves a cloth moistened with water at room temperature. Applying the cloth to the skin for about 20 minutes. If the patient develops any hives welts or wheals the diagnosis is confirmed.

## Prevention:

Antihistamines like 1% diphenhydramine before the water contact is reported to be helpful in reducing the hives.<sup>4</sup> Furthermore serious precautionary measures can be taken for example opting for hand sanitizers and wipes to avoid the contact with water and also bathes can be taken mixed with baking soda to avoid the reaction. No more walks in rain or snow. Milk and diet soda is used instead of water juices teas and coffees.

## Treatment:

No cure has been discovered for this condition so far but oral or topical antihistamine.

Topical corticosteroids specifically stanozolol

Phototherapy

Barrier cream

## Aquagenic urticaria: report of a case and review of the literature:<sup>5</sup>

**Objective:** To show a case of aquagenic urticaria and to survey the writing with respect to this exceptionally uncommon physical urticaria.

**Method:** We depicted the clinical history of a patient with aquagenic urticaria. A water challenge test was performed, with plasma histamine levels measured previously and after the challenge.

**Result:** patient displayed with a history of serious tingling and wheals inside five minutes of contact with water, notwithstanding of its temperature or source (ocean or tap water). A water challenge delivered hives but serum histamine levels did not alter. Prophylaxis with antihistamine or anticholinergic medicines was not potent.

**Conclusion:** Introduction to water can cause urticaria in vulnerable patients and antihistamine and anticholinergic pharmaceutical may not anticipate the response. The instrument of this marvel remains ineffectively caught on.

Another case of a 34-year-old woman with a history of seasonal rhinitis and asthma who developed pruritic, erythematous wheals in her neck, scruff, face, neckline, back,

and arms a few minutes after coming into contact with seawater.<sup>6</sup>

#### References:

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