

DEFINITION

Well-circumscribed skin lesions that are intensely pruritic, raised wheals (hives), typically 1-2 cm in diameter, although they can vary in size and may coalesce. They also can appear pale to brightly erythematous.

IMMEDIATE CONSULTATION REQUIRED IN THE FOLLOWING SITUATIONS

- Client with shortness of breath, wheezing or swelling of tongue or mouth (angioneurotic edema)
 - Treat for anaphylactic shock as per employer protocol.

CAUSES

- Immunoglobulin E mediated
 - Aeroallergens
 - Contact allergens
 - Food allergens
 - Insect venom
 - Medications (allergic reaction)
 - Parasitic infections
- Non-Immunoglobulin E mediated
 - Cryoglobulinemia
 - Autoimmune disease
 - Infections (bacterial, fungal, viral)
 - Lymphoma
 - Vasculitis
- Non-immunologically mediated
 - Elevation of core body temperature
 - Food allergens
 - Light
 - Medications (direct mast cell degranulation)
 - Physical stimuli (cold, local heat, pressure)
 - Water
- Chronic urticarial or chronic idiopathic urticarial
 - Present most days for at least 6 weeks and can last up to 5 years

URTICARIA ADULT & PEDIATRIC

PREDISPOSING AND RISK FACTORS

- Exposure to trigger

HISTORY

- Recent medication intake including vitamins, acetylsalicylic acid (ASA), non-steroidal anti-inflammatory drugs (NSAIDs), antacids, opioids, and progesterone
- Recent exposure to one of above causes
- Intensely pruritic, raised wheals
- Client may feel unwell

PHYSICAL FINDINGS

- May occur anywhere on body
- May be localized or generalized
- Lesions multiple, irregular in shape and size
- Raised white or light rose-pink patches, usually surrounded by red halo
- Peripheral extension and coalescence of patches may occur
- Patches may wax and wane
- Individual wheals rarely persist for > 12-24 hours
- Signs of scratching may be evident
- Anxiety
- May progress to gasping for air, respiratory stridor and hoarseness

DIFFERENTIAL DIAGNOSIS

- Atopic dermatitis
- Contact dermatitis
- Fixed drug reaction
- Vasculitis
- Insect bites
- Erythema multiforme
- Systemic lupus erythematosus
- Henoch-Schönlein purpura
- Morbilliform drug reactions
- Pityriasis rosea
- Viral exanthem

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COMPLICATIONS

- Recurrence
- Severe itching
- Systemic allergic response with bronchospasm
- Anaphylaxis

INVESTIGATIONS AND DIAGNOSTIC TESTS

- None

MAKING THE DIAGNOSIS

- The diagnosis is usually made clinically based on the health history and physical exam.

MANAGEMENT AND INTERVENTIONS

Goals of Treatment

- Relieve symptoms
- Identify precipitating factor(s)
- Prevent recurrence
- Desensitization to the trigger antigen may be possible

Appropriate Consultation

- Presentation consistent with those identified in the Immediate Consultation Required in the Following Situations section.
- Consult a physician/RN(NP) if:
 - symptoms are severe.
 - complications are present.
 - client is pregnant or lactating.

Non-Pharmacological Interventions

- Application of cool compresses to reduce itching
- Avoidance of overheating
- Temporary avoidance of hot, spicy food

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Pharmacological Interventions

- Apply topical antipruritic agents:
 - Calamine lotion qid prn
- Children
 - First generation antihistamine to relieve itch and suppress formation of new lesions:
 - DiphenhydrAMINE hydrochloride (Benadryl)
 - 2 - < 6 years of age: 6.25 mg orally q6-8h prn (maximum dose 37.5 mg/day)
 - 6 - < 12 years of age: 12.5-25 mg orally q6-8h prn (maximum dose 150 mg/day)
 - ≥ 12 years of age: 25-50 mg orally q6-8h prn (maximum dose 300 mg/day)
 - Use with caution in children < 2 years of age due to sedative effects
 - Or
 - Second generation antihistamine to relieve itch and suppress formation of new lesions:
 - Cetirizine (Reactine)
 - 6-12 months of age: 2.5 mg orally once daily
 - 12-23 months of age: initial dose of 2.5 mg orally once daily; dosage may be increased to 2.5 mg orally bid
 - 2-5 years of age: 2.5 mg orally once daily; may be increased to a maximum of 5 mg orally once daily given either as a single dose or divided into 2 doses
 - 6 years of age to adult: 5-10 mg orally once daily as a single dose or divided into 2 doses
- Adult
 - First generation antihistamine to relieve itch and suppress formation of new lesions:
 - DiphenhydrAMINE (Benadryl) 25-50 mg orally q6-8h for 2-7 days
 - Or
 - HydrOXYzine (Atarax) 25-50 mg orally q6-8h for 2-7 days
 - Especially when anxiety and excessive scratching are present
- Or

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- Second generation antihistamine to relieve itch and suppress formation of new lesions:
 - Cetirizine (Reactine) 10 mg orally once daily or bid
 - Loratidine (Claritin) 10 mg orally once daily or bid

Client and Caregiver Education

- Counsel client/caregiver about appropriate use of medications (dose, frequency, compliance, etc.).
- Recommend proper skin hygiene to prevent infection.
- Recommend avoidance of scratching; client should keep fingernails short and clean.
- Assist client in identifying causative agent (including any recent changes in food or brands, as different food companies put different additives into their products).
- Reassure client that episodes are self-limited.

Monitoring and Follow-Up

- Follow-up in 2-7 days.
- Instruct client to return for reassessment if lesions progress despite therapy.
- Instruct client to return to clinic immediately if shortness of breath, wheezing, or swelling of tongue or mouth occurs.

Referral

- Refer to a physician/RN(NP) for evaluation if lesions are recurrent (to rule out allergies or an underlying organic pathology).

DOCUMENTATION

- As per employer policy

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CLINICAL DECISION TOOL
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