

VARICELLA (CHICKENPOX)

I. DEFINITION:

An acute, usually benign, highly contagious viral childhood disease associated with pruritic vesicular rash that appears in crops.

II. CLINICAL FEATURES:

- A. Prodrome usually not apparent; Fever, malaise, anorexia, headache, and occasionally mild abdominal pain may occur 24-48 hours before the rash appears. Temperature elevation is usually moderate, usually 100-102°F, but may be as high as 106°F; fever and other systemic symptoms usually resolve within 2-4 days after the onset of the rash
- B. A highly pruritic rash is usually the first sign.
 - 1. Lesions tend to appear in crops (2-4 crops in 2-6 days), and all stages and signs may be present at the same time and in the same vicinity.
 - 2. Lesions begin centrally on the face, trunk or scalp and spread from there. Palms and soles are not involved.
 - 3. Successive stages of the lesions (usually over a period of 1-4 days):
 - a. Macules
 - b. Papules
 - c. Vesicular lesions are very fragile, generally not umbilicated, appearing as a drop of water on a slightly reddened base (may appear as a dew drop on a rose petal). The tops of the lesions may be readily scratched off.
 - d. Pustular with crust formation – this stage may be reached within a few hours after the appearance of the macule. Scabs disappear by the 9th or 10th day.
- C. Pruritus is minimal at first but may become severe in the pustular stage.
- D. Fever may occur.

III. MANAGEMENT:

- A. Measures to control pruritus
 - 1. Calamine or Cetaphil lotion to lesions.
 - 2. Alternatively, recommend diphenhydramine HCL (Benadryl) (See APPENDIX).
 - 3. Benadryl Gel may cause sensitivity and is not recommended.
 - 4. Bathe with baking soda or Aveeno® and cut nails to prevent bacterial superinfection.
 - 5. Skin may be gently washed with soap and water to reduce the risk of infection. Traditionally soda water baths have helped some (2 Tablespoons baking soda in lukewarm bath water).
- B. Symptomatic treatment to reduce fever and discomfort
 - 1. Use acetaminophen according package directions.

2. Never use aspirin or aspirin containing products in children and adolescents due to the risk of Reye Syndrome that may follow chickenpox.

C. Control Measures

1. Clients may return to school/work after all the lesions are crusted, which may be several days in mild cases to several weeks in severe cases and are fever free for 24 hours without the use of antipyretics.
2. Encourage parent/caregiver to notify daycare or school of condition.
3. Post-exposure prophylaxis: ACIP recommends the vaccine for use in susceptible persons following exposure to varicella. Data indicate that the vaccine is effective in preventing illness or decreasing the severity of the illness if used within 3 days, and possibly up to 5 days, of exposure. Susceptible children 18 years of age or younger and VFC eligible should be vaccinated as quickly as possible following exposure; anyone else should be referred to their PCP for vaccination.

D. Complications

1. Uncommon except in neonates and immunocompromised individuals. Fever and constitutional symptoms may occasionally be severe in a normal adult.
2. Aspirin and aspirin containing medications are contraindicated due to association with Reye Syndrome. Reye Syndrome usually develops toward the end (usually within one week) of a viral illness like chickenpox or influenza. Symptoms and signs initially include lethargy, drowsiness, vomiting, and irrational behavior and rapidly progress to stupor and coma.
3. Other complications which may occur: secondary bacterial infections, pneumonia, encephalitis, severe disseminated disease, bleeding disorders, arthritis, hepatitis, and glomerulonephritis. Children with AIDS can develop chronic chickenpox with new lesions appearing during a period of months.

E. Referral

1. Refer infants less than 6 months of age with symptoms of disease.
2. Refer any client with a history of steroid or immunosuppressive I-therapy, immunologic deficiency, or malignant disease.
3. Refer all clients with sign or symptoms of complications or severe secondary bacterial infections.
4. Refer all pregnant women to their private physician.
5. IF CHILD DEVELOPS SIGNS AND SYMPTOMS OR REYE SYNDROME, IMMEDIATELY REFER.
6. For more intense itching, consult or refer to APRN or private physician.

F. Follow-up

In routine cases no follow-up is required. Immediately refer client to APRN or private physician if signs and symptoms of secondary bacterial infection occur.

APPENDIX

BENADRYL DOSAGE SCHEDULE

DRUG NAME: BENADRYL (Diphenhydramine) Oral Elixir
 USUAL DOSAGE: 5 mg/kg/24 hours P.O., divided in 3-4 doses, PRN
 Maximum daily dose should not exceed 300 mg
 HOW SUPPLIED: 12.5 mg Diphenhydramine/5 ml (2.5 mg/ml)
 PERTINENT INFORMATION: May give to children greater than 10 kg (22 lbs)

DOSAGE SCHEDULE BY WEIGHT (Calculations based on usual dosages)			
POUNDS	KILOGRAMS	DOSAGES IN mg.	DOSAGES IN ml.
23 – 27	10-45 – 12.27	12.5 mg qid	5.0 ml or 1 tsp. qid
28 – 38	12.73 – 17.27	19.0 mg qid	7.5 ml or 1 ½ tsp. qid
39 – 49	17.73 – 22.27	25.0 mg qid	10.0 ml or 2 tsp. qid
50 – 60	22.73 – 27.27	31.0 mg qid	12.5 ml or 2 ½ tsp. qid
61 – 71	27.73 – 32.27	37.5 mg qid	15.0 ml or 3 tsp. qid
72 – 82	32.73 – 37.27	44.0 mg qid	17.5 ml or 3 ½ tsp. qid
83 – 93	37.73 – 42.27	50.0 mg qid	20.0 ml or 4 tsp. qid
94 – 104	42.73 – 47.27	50.0 mg qid	20.0 ml or 4 tsp. qid
105 – 115	47.73 – 52.27	50.0 mg qid	20.0 ml or 4 tsp. qid
116 – 126	52.73 – 57.27	50.0 mg qid	20.0 ml or 4 tsp. qid
127+	57.73+	50.0 mg qid	20.0 ml or 4 tsp. qid

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