

Transfusionists Talk – Transfusion Made Bloody Easy

C1 ESTERASE INHIBITORS & IMMUNE SERUM GLOBULIN (IMIG): TRANSFUSIONISTS QUESTIONS ANSWERED ...

June 18, 2025

Pre/Post Transfusion Knowledge Questions and the Answers with Rationale

1. Frieda, a young adult, has developed episodes (about twice a month) of painful facial swelling (eyes, lips) that are resolved in 3-5 days but do result in absence from work. The pain & swelling is not accompanied by a rash, itching or difficulty breathing. Frieda has ignored these episodes as “something I ate”; her family is concerned, urging her to seek medical investigation.

Frieda should seek medical attention because (select all applicable):

- a) Frieda might develop a serious anaphylactic reaction.
- b) Frieda may be a candidate for long term disability benefits.
- c) Frieda should be tested for hereditary angioedema.
- d) Medication or a blood product, Berinert®, may relieve these acute episodes.

Answer: a), c), d).

Rationale:

a)

Facial swelling can be a symptom of an evolving anaphylactic reaction. In Frieda’s scenario previous episodes have not progressed, however that is not necessarily predictive of future episodes. Medical investigation for a diagnosis would be appropriate.

c)

Frieda’s symptoms and scenario (random, unpredictable attacks of painful swelling that is not pruritic, asymmetrical in distribution, with a 3-5 day duration, onset as a young adult) are consistent with possible hereditary angioedema (HAE). Testing would be prudent as a definitive diagnosis would lead to establishment of an acute attack treatment plan. Laryngeal HAE attacks, if untreated, carry approximately 30% mortality risk.

d)

If HAE is diagnosed, treatment with medication or a blood product, Berinert® can be beneficial to decrease the severity and duration of acute attacks.

b)

If necessary, long term disability benefits would be coordinated via Frieda’s employer’s policies and procedures.

2. Pebbles, a 5-month-old infant, was at the babysitter's home from 7 am to 5 pm on Monday. The babysitter's sibling was visiting for the day and has now been diagnosed with measles (the babysitter's sibling did not receive measles vaccine as a child).

Pebbles (weight 7 kg) should receive measles post exposure prophylaxis (select all applicable):

- a) Measles, mumps rubella (MMR) vaccine 0.5 mL SC, ASAP within 6 days of the exposure.
- b) Measles, mumps rubella (MMR) vaccine 0.5 mL SC, ASAP within 6 weeks of the exposure.
- c) GamaSTAM® (IMIG) 1.75 mL IM, ASAP within 6 days of the exposure.
- d) GamaSTAM® (IMIG) 1.75 mL IM, ASAP within 6 weeks of the exposure.

Answer: c) only

Rationale:

Per [Public Health Ontario](#), routine immunization schedule for children age 12 months and over is two doses of measles-containing vaccine (one dose of MMR at 1 year of age and one dose of MMRV between 4 and 6 years of age (prior to school entry).

Pebbles is a 5-month-old infant and would not have received routine measles vaccine (Note: During a measles outbreak, one dose of MMR can be given to infants 6-12 months of age).

In scenarios such as Pebbles, where the measles vaccine was not given prior to exposure, GamaSTAN® can prevent or modify measles. Unvaccinated measles contacts under age 1 year are at highest risk of complications.

Per the product monograph, GamaSTAN® should be given ASAP, within 6 days of exposure. The GamaSTAN® measles post exposure prophylaxis dose is 0.25 mL/kg and must always be given intramuscularly (IM). Pebbles' weight is 7 kg, accordingly her GamaSTAN® dose is 1.75 mL.

GamaSTAN® & measles vaccine should not be given at the same time (MMR is a live viral vaccine. Such vaccines should be deferred for about 5-6 months post GamaSTAN®).

References:

Please refer to the references listed in the presentation.