INESSS
LE SAVOIR PREND FORME

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INTRAVENOUS IMMUNOGLOBULIN (IVIg)

USE IN DERMATOLOGY

This optimal use guide is intended for dermatologists and other medical specialists who treat patients with dermatological disease with IVIg. It is provided for information purposes only and should not replace the judgment of the clinician who performs activities reserved under an act or a regulation. The recommendations were developed using a systematic process and are supported by the scientific literature and by the knowledge and experience of Québec clinicians and experts. For further details, go to inesss.qc.ca.

GENERAL INFORMATION

- Intravenous non-specific human immunoglobulin (IVIg) preparations are stable products derived from human plasma.
- Their use continued to increase in Québec in the past several years. Because of their high cost and the risk of a shortage, it is important to ensure that they are used judiciously.
- The price of one gram of IVIg is approximately $90 (2017). This price may vary, depending on the exchange rate for the Canadian dollar and the volume of fractionation plasma collected by Héma-Québec. The cost of IVIg for a 70-kg adult is approximately $12,600 for short-term therapy (at a total dose of 2 g/kg divided over 2 to 5 days).

INITIATING, MONITORING AND DISCONTINUING IVIg THERAPY

- Before initiating IVIg therapy:
  - A diagnosis should be confirmed by a medical specialist;
  - The patient's free and informed consent must have been obtained and recorded in his or her medical record;
  - The patient's ideal weight should be calculated;
  - The patient's blood type should be determined, if it is not already indicated in his or her record.
- After IVIg therapy is initiated:
  - The tolerance and effectiveness of the therapy should be assessed on a regular basis by a medical specialist;
  - The frequency of this assessment should be determined according to the patient's clinical status or after 3 to 6 months following the initiation of long-term treatment, then every 6 or 12 months depending on the indication.
- If no benefit is observed in terms of the patient's clinical status during the medical reassessment, the therapy should be adjusted or discontinued and another therapy considered.

Québec

RECOMMENDATIONS FOR USING IVIg BY INDICATION

A total of 15 dermatological indications were evaluated – list not exhaustive

IVIg RECOMMENDED

INDICATION(S)	CONDITIONS OF USE
Pemphigus	▸ In patients with a severe form of pemphigus, to achieve rapid remission ▸ In the event of failure, contraindication or intolerance to the other therapeutic options
Group of pemphigoids: mucous membrane pemphigoid, bullous pemphigoid and gestational pemphigoid	▸ In patients with a severe form of pemphigoid or in whom the condition is rapidly progressing, to achieve rapid remission ▸ In the event of failure, contraindication or intolerance to the other therapeutic options

IVIg A POSSIBLE TREATMENT OPTION

INDICATIONS	CONDITIONS D'USAGE
Dermatomyositis[1] (including the juvenile form)	▸ Always in combination with immunosuppressive treatments ▸ Failure of first-line treatments or to reduce chronic high doses of corticosteroids
Scleredema	▸ In patients with a severe form of the condition ▸ In the event of failure, contraindication or intolerance to the other therapeutic options
Scleromyxedema	
Necrobiotic xanthogranuloma	
Pyoderma gangrenosum	
Pretibial myxedema	
Livedoid vasculopathy	

1. Based on the clinical experience of the expert committee's members, for patients with dermatomyositis, IVIg can be considered on an exceptional basis as initial first-line treatment in combination with immunosuppressive treatments in cases of severe muscle weakness, including oropharyngeal dysphagia, or in special clinical situations (diagnosis of scleroderma, gastrointestinal vasculitis and skin ulcers).

INSUFFICIENT DATA

INDICATIONS	
▸ Epidermolysis bullosa acquisita[2]	▸ Linear IgA bullous dermatosis[2]

2. Based on the clinical experience of the advisory committee's members, IVIg may be considered for the treatment of the severe form of disease or in the event of failure, contraindication or intolerance to the other therapeutic options.

IVIg NOT RECOMMENDED

INDICATIONS	
▸ Stevens-Johnson syndrome/toxic epidermal necrolysis[3] ▸ Dermatitis herpetiformis[3]	▸ Atopic dermatitis/eczema ▸ Urticaria[3]

3. Based on the clinical experience of the advisory committee's members, IVIg may be considered in the event of failure, contraindication or intolerance to all the other therapeutic options.

DOSE AND FREQUENCY OF ADMINISTRATION OF IVIg

- The use of the ideal weight should be considered when calculating the doses to be administered to a **clinically obese adult.**

IVIg	ADULTS AND CHILDREN	
Treatment cycle	Adult[1]: 2 g/kg (total dose) divided over 2 to 5 days Pediatric[1]: 0.2 to 2 g/kg (total dose) divided over 1 to 5 days	The dose can be adjusted or repeated based on the individual clinical response.

1. IVIg prescribed at a dose higher than 1 g/kg should only be administered over several days without exceeding 1 g/kg/day.

TRANSFUSION REACTIONS ASSOCIATED WITH IVIg

NON-SERIOUS TRANSFUSION REACTIONS (the most common)	SERIOUS TRANSFUSION REACTIONS (usually rare)
▸ Post-IVIg headache, non-hemolytic febrile reaction, chills, urticaria, asthenia, nausea, vomiting, flu-like symptoms, atypical pain, and post-transfusion hypertension or hypotension (list not exhaustive)	▸ Immediate anaphylactic reaction, thromboembolic event, immediate or delayed hemolytic reaction, aseptic meningitis, transfusion-related acute lung injury (TRALI), transfusion-associated circulatory overload (TACO), and acute renal failure (list not exhaustive)

- Serious and non-serious transfusion reactions (particularly those that result in a change in the dose, frequency or type of IVIg administered or that warrant discontinuing the therapy) must be reported to the blood bank using Form AH-520

RELATIVE CONTRAINDICATIONS AND MAIN PRECAUTIONS CONCERNING IVIg

RELATIVE CONTRAINDICATIONS

- A known allergy to any of the product's ingredients
- A history of severe allergic reaction to Ig (immediate anaphylactic or delayed)

RECAUTIONS

Hemolysis	Thrombosis	Renal function
▸ IVIg-related hemolysis is more common in patients with type A, B or AB blood who receive a high total IVIg dose (≥ 2 g/kg). ▸ Monitor the patient for signs and symptoms of hemolysis. If any appear, order the appropriate laboratory tests.	▸ Thrombosis formation can occur with any type of Ig in patients with or without risk factors, regardless of the dose administered or the route of administration.	▸ Check renal function if there is an increased risk of acute renal failure. ▸ If renal function deteriorates, consider discontinuing the IVIg.

This guide was developed in collaboration with an expert committee, and INESSS supports the recommendations made.

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