



Ontario Naturopathic Integrative Network

Intravenous (IV) and Intramuscular (IM) Injection Protocol of MIC Plus B12

Rationale

MIC injections contain a combination of lipotropic agents—Methionine, Inositol, Choline—that support the breakdown and metabolism of fat. Vitamin B12 is added to enhance energy levels and support red blood cell formation. This combination may assist in weight loss, improve liver function, and offer various health benefits including cholesterol and blood sugar level regulation.

Clinical Indications

- Metabolism of fat cells
- Reduction of stored fat deposits in the liver and body
- Support for liver function
- Energy boost

Key Ingredients:

- **Methionine:** An essential amino acid acts as a lipotropic agent and increases lean muscle mass.
- **Inositol:** Aids in insulin regulation, carbohydrate use, and fat metabolism. Inositol also has many other benefits in the body:
 - Vital for healthy hair growth
 - Reduces blood cholesterol
 - Controls appetite
 - Plays a role in mood and helps to balance serotonin and dopamine
 - Inositol is sometimes used to help treat panic disorders, depression, polycystic ovarian syndrome (PCOS), and fatty liver.
- **Choline:** Supports liver function and fat metabolism.
- **Vitamin B12:** Essential for nerve and red blood cell formation and energy metabolism.

Contraindications

- Pregnancy and breastfeeding
- Allergy to cobalt or Vitamin B12
- Elevated Vitamin B12 levels

Side Effects and Management

- Allergic reactions: Monitor and treat with antihistamines or corticosteroids as needed.
- Gastrointestinal disturbances: Manage with dietary modifications and hydration.
- Injection site reactions: Apply cold compresses and ensure proper injection technique.
 - Neurological symptoms (e.g., anxiety, numbness): Monitor closely; reduce dose if symptoms persist.

Pre-treatment Evaluation

- Assess weight and body measurements.
- Review medical history for contraindications.
- Confirm absence of allergies to injection components.

Dosage and Administration

- **Standard Dose:** 1 mL of MIC-B12 combination, containing Methionine (15mg), Inositol (50mg), Choline (100mg), and Vitamin Methyl-B12 (1000mcg).
- **Frequency:** Intramuscularly once weekly; may increase to twice weekly based on response.
- **IM Injection Sites:** Gluteal muscle, thigh, deltoid, or ventrogluteal site using a 1-1.5-inch, 22–25-gauge needle.
- **Common IV Therapy Composition (for weight loss):**
 - Sterile Water 250mL
 - B complex (100 mg/mL) 1 cc
 - Methyl B12 (1 mg/mL) 2 cc
 - Vitamin C (500 mg/mL) 30 cc
 - MIC 1 cc
 - B6 (100 mg/mL) 1 cc
 - MgCl (200 mg/mL) 5 cc

- Taurine (50 mg/mL) 2cc

Optional

- Consecutive treatment with Glutathione (100 mg/ml) start with 10cc (1g) and increase to 20cc (2g)

Post-Injection Care:

- Apply pressure to the site post-injection if necessary.
- Monitor the patient for immediate adverse reactions.

Monitoring and Follow-Up

- Schedule follow-up appointments for progress evaluation.
- Monitor weight or body measurements as per treatment goals.

Duration of Treatment

- Typically, bi-weekly for about 3 months, adjusted based on individual progress and treatment response.