## Vitamin B12 (Methylcobalamin)

## Vitamin B12 Side Effects

### **Common side effects of vitamin B12:**

- Headache
- Itching
- Swelling
- Nervousness and anxiousness
- Involuntary or uncontrollable movements

#### **Serious side effects:**

- Low levels of potassium in the blood
- Congestive heart failure
- Clots in the arms and legs
- Life-threatening allergic reaction called anaphylaxis, in which you may have trouble breathing, your tongue swells and/or throat closes up, and your skin breaks out into hives
- Fluid building up in the lungs

# Vitamin B12 Side Effects

#### Generic Name: cyanocobalamin

**Note:** This page contains side effects data for the generic drug cyanocobalamin. It is possible that some of the dosage forms included below *may not* apply to the brand name Vitamin B12.

## For the Consumer

Applies to cyanocobalamin: intramuscular solution

Other dosage forms:

• <u>nasal gel/jelly, nasal spray</u>

As well as its needed effects, cyanocobalamin (the active ingredient contained in Vitamin B12) may cause unwanted side effects that require medical attention.

# If any of the following side effects occur while taking cyanocobalamin, check with your doctor or nurse immediately:

#### Incidence not known

- Abdominal or stomach pain
- bleeding from the gums or nose
- blue lips and fingernails
- chest pain
- cough
- coughing that sometimes produces a pink frothy sputum
- decreased urine output
- difficult, fast, noisy breathing, sometimes with wheezing
- difficulty with swallowing
- dilated neck veins
- dizziness
- extreme fatigue
- eye pain
- fast heartbeat
- headache
- hives, itching, or skin rash
- increased sweating
- irregular breathing
- irregular heartbeat
- pale skin
- puffiness or swelling of the eyelids or around the eyes, face, lips, or tongue
- ringing in the ears
- swelling of the face, fingers, feet, or lower legs
- tightness in the chest
- unusual tiredness or weakness
- weight gain

Some cyanocobalamin side effects may not need any medical attention. As your body gets used to the medicine these side effects may disappear. Your health care professional may be able to help you prevent or reduce these side effects, but do check with them if any of the following side effects continue, or if you are concerned about them:

#### Incidence not known

- Diarrhea
- skin rash with a general disease

## For Healthcare Professionals

Applies to cyanocobalamin: compounding powder, injectable solution, intramuscular solution, nasal gel, nasal spray, oral tablet, oral tablet extended release, sublingual lozenge, sublingual tablet

#### Cardiovascular

Cardiovascular side effects associated with parenteral cyanocobalamin (the active ingredient contained in Vitamin B12) have included congestive heart failure, pulmonary edema, and peripheral vascular thrombosis. These effects were usually reported early in treatment.<sup>[Ref]</sup>

#### Dermatologic

Dermatologic side effects associated with both intranasal and parenteral cyanocobalamin (the active ingredient contained in Vitamin B12) have included itching and transitory exanthema.

Dermatologic side effects have rarely included exacerbation or onset of inflammatory acne and folliculitis related to B12.<sup>[Ref]</sup>

Exacerbation or onset of inflammatory acne and folliculitis have been seen with high doses of B12 (5 to 10 mg/week). The etiology and pathogenic mechanisms of vitamin B12-induced acne are unknown. When present, acneiform eruptions usually occur on the facial area after the first or second injection, and typically disappear within 8 to 10 days after stopping therapy.

A single case of a severe skin eruption resembling acne rosacea that was temporally associated with daily ingestion of 100 mcg of B12 (with 100 mg of B6) has been reported. The rash resolved upon discontinuation of both drugs and recurred upon rechallenge with half the doses.

Some have suspected sorbitol or iodine that is present in some ampules of B12 may be the cause of at least some cases of skin eruptions associated with this drug.<sup>[Ref]</sup>

#### Gastrointestinal

A single case of cecal vitamin B12 bezoar has been reported in an elderly man with a history of multiple gastrointestinal surgeries.<sup>[Ref]</sup>

Gastrointestinal side effects associated with parenteral cyanocobalamin have included dyspepsia, nausea, vomiting, and mild transient diarrhea.

Gastrointestinal side effects associated with intranasal cyanocobalamin have included glossitis and nausea.<sup>[Ref]</sup>

## Hypersensitivity

Anaphylactic reactions have been reported primarily with parenteral administration of B12 and are thought to be the result of impurities of B12 preparations that are no longer manufactured. They may occur soon after a sensitizing dose, within a few weeks or months, or rarely after a latency of several years.<sup>[Ref]</sup>

Hypersensitivity side effects associated with parenteral cyanocobalamin have rarely included anaphylactic reactions and death.<sup>[Ref]</sup>

#### Nervous system

Nervous system side effects associated with parenteral cyanocobalamin (the active ingredient contained in Vitamin B12) have included abnormal gait, asthenia, anxiety, dizziness, hypoesthesia, incoordination, nervousness, and incoordination.

Nervous system side effects associated with both parenteral and intranasal cyanocobalamin have included paresthesia and headache.<sup>[Ref]</sup>

## Hematologic

Hematologic side effects have included polycythemia vera.<sup>[Ref]</sup>

#### Musculoskeletal

Musculoskeletal side effects associated with parenteral cyanocobalamin (the active ingredient contained in Vitamin B12) have included arthritis, back pain, and myalgia.<sup>[Ref]</sup>

#### Respiratory

Respiratory side effects associated with parenteral cyanocobalamin (the active ingredient contained in Vitamin B12) have included dyspnea.

Respiratory side effects associated with both parenteral and intranasal cyanocobalamin have included rhinitis.<sup>[Ref]</sup>

#### Immunologic

Immunologic side effects associated with both parenteral and intranasal cyanocobalamin (the active ingredient contained in Vitamin B12) have included infection.<sup>[Ref]</sup>

### Other

Other side effects associated with parenteral administration of cyanocobalamin (the active ingredient contained in Vitamin B12) have included feeling of swelling of entire body, back pain, and generalized pain.<sup>[Ref]</sup>

## References

1. "Product Information. Nascobol (cyanocobalamin nasal)." Schwarz Pharma, Mequon, WI.

2. Sherertz EF "Acneiform eruption due to "megadose" vitamins B6 and B12." Cutis 48 (1991): 119-20

3. Dupre A, Albarel N, Bonafe JL, Christol B, Lassere J "Vitamin B-12 induced acnes." Cutis 24 (1979): 210-1

4. Gallastegui C, Cardona D, Pujol R, Garcia B, Bonal J, Andreu A "Vitamin B12-induced folliculitis." DICP 23 (1989): 1033-4

5. Malten KE "Flare reaction due to vitamin B12 in a patient with psoriasis and contact eczema." Contact Dermatitis 1 (1975): 325-6

6. Hunt-Fugate AK, Schmidt HJ "Cecal vitamin bezoar formation inducing abdominal discomfort." Ann Pharmacother 26 (1992): 485-7

7. Ugwu CN, Gibbins FJ "Anaphylactic reaction to vitamin B12 appearing after several years of therapy." Age Ageing 10 (1981): 196-7

8. Hovding G "Anaphylactic reaction after injection of vitamin B12." Br Med J 3 (1968): 102

9. Sawyer DR "Cyanocobalamin and cyanide toxicity." Am Fam Physician 26 (1982): 48

It is possible that some side effects of Vitamin B12 may not have been reported. These can be reported to the FDA <u>here</u>. Always consult a healthcare professional for medical advice.

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# **Cobalt Side Effects**

Side effects due to the excessive intake of cobalt which is a component of vitamin B12:

Cardiomyopathy (a pro blood)

Deafness

Nerve problems

Ringing in the ears (tinnitus)

Thickening of the blood

Thyroid problems

Here here are some more side effects of excessive cobalt: Angina, panic-anxiety attacks, shortness of breath, asthma, cardiomyopathy, congestive heart failure, polycythemia, (hypo)thyroid problems, neurological problems, overproduction of red blood cells, skin rash, infertility, dermatitis.

I call B12 and Folic Acid as "drugs" even though they are dietary supplements, as the doses administered were way too high and a cause of serious concern and under these circumstances must be treated as "drugs".

Blessings, Pramod Vora