VALLEYHEALTH

Understanding Alpha-Gal Syndrome

Alpha-Gal Syndrome (AGS) is a food allergy that begins after being bitten by a tick—most commonly the **lone star tick.** The tick carries a sugar molecule called **Alpha-Gal,** which is found in most mammals but not in humans. After the bite, the immune system can overreact to that molecule when you eat red meat.

Reactions are unusual because they happen **3–6 hours after eating** rather than immediately. Understanding the signs, causes, and prevention strategies helps manage this condition effectively.

Symptoms and Warning Signs

Symptoms of AGS can vary from mild discomfort to severe allergic reactions. Many people notice symptoms several hours after eating red meat or foods containing gelatin.

Common symptoms include:

- Hives or itchy rash
- Swelling of the lips, eyes, or throat
- Abdominal pain, nausea, or diarrhea
- Shortness of breath or chest tightness

In rare cases, it can cause **anaphylaxis,** a medical emergency that requires **immediate care.**

What Causes the Allergy

The **lone star tick** transmits Alpha-Gal into the bloodstream during a bite. Later, when a person eats mammal meat, their immune system reacts as though fighting an invader.

You're at high risk if you:

- Live or work in wooded or grassy areas
- Spend time outdoors in the southern or eastern U.S.
- Have had multiple tick bites

Protecting yourself outdoors is critical to preventing new exposures and reactions.

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Diagnosis

Healthcare providers diagnose Alpha-Gal Syndrome by reviewing your medical history, diet, and potential tick exposure. Testing generally includes a **blood test for Alpha-Gal-specific IgE antibodies** to confirm a reaction.

Keeping a **food and symptom diary** also helps your provider identify patterns and possible triggers.

Treatment and Management

There's no current cure for Alpha-Gal Syndrome, but the condition can be managed with lifestyle changes and awareness.

Key management steps:

- Avoid red meat such as beef, pork, lamb, and venison.
- Choose safe proteins like poultry, fish, and plant-based options.
- Read food and medication labels for **gelatin or animal ingredients.**

Avoiding further tick bites is the best way to reduce long-term risk.

When to See a Doctor

If you experience hives, swelling, or difficulty breathing after eating, contact emergency services immediately. For recurring symptoms, schedule an evaluation with your healthcare provider. **Valley Health** providers can help with diagnosis, management, and prevention planning.

Alpha-Gal Syndrome can be managed with a clear plan and the right support. If you've had tick bites or notice delayed reactions after eating red meat, our team can help you get tested and create a safe eating plan.

To learn more or schedule with Valley Health, visit valleyhealth.org.