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## Giant Cell Arteritis

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### Take Home Points

- Giant cell arteritis (GCA) should be considered in patients greater than age 60 with sudden onset of visual loss, transient visual loss or diplopia over the preceding month.
  - CRP is more sensitive than ESR for giant cell arteritis but ideally both CRP and ESR should be evaluated.
  - At least 25% of patients with giant cell arteritis do not have systemic symptoms.
- There are three scenarios in which we need to consider giant cell arteritis.
    - 1) **Any time you see a patient greater than age 60 with sudden onset of visual loss.** Giant cell arteritis (GCA) has been reported in patients as young as 51 years. The incidence of GCA rises dramatically in patients 60 years of age or older.
    - 2) **Any patient over the age of 60 who presents with a history of transient visual loss over the last month.**
    - 3) **Any patient over age 60 who present with transient double vision over the last month.**
  - **Patients need to be identified and treated right away to preserve vision in the other eye and prevent further visual loss.** The highest risk of visual loss is within the first 10 days.
  - **Check both an ESR and CRP.** If you only have access to one test, order a CRP as it is much more sensitive for giant cell arteritis. If you order both tests, the sensitivity increases to nearly 99.5%. If a patient has normal ESR and CRP, the chances of giant cell arteritis are low (0.5%-3%).
  - **If only one inflammatory marker is elevated, the patient should be started on high dose steroids and ophthalmology**

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or neuro-ophthalmology should be consulted right away. Margolin keeps prednisone in his office and if he suspects giant cell arteritis, he starts it immediately. Delays can result in blindness.

- **Giant cell arteritis is a vasculitis affecting medium sized vessel.** There is inflammation of the vessel wall. The blood flow can shrink just enough to present transient ischemia and eventually it will close off and blindness will ensue. You need to act quickly.
- **What is considered positive ESR?** For men, it is  $\text{age}/2$ . For women it is  $(\text{age} + 10)/2$ . If you have an 80 year old female, the highest allowable ESR would be 45.
- **Should we see other symptoms such headache, jaw claudication or tenderness over the temporal artery?**
  - At least 25% of patients with GCA will have no systemic symptoms. The first manifestation may be visual loss.
  - The most specific symptom is jaw claudication. Patients may say that they are having a difficult time chewing because they experience pain. Scalp tenderness may be another sign.
  - Presence of systemic symptoms is useful but their absence does not rule out GCA.
- **When vision loss occurs, it is usually catastrophic and irreversible.** Starting steroids will not affect the biopsy. If the patient has lost vision, they should be treated with 1g IV methylprednisolone. If they haven't lost vision but have transient vision loss or diplopia, they can be treated with oral prednisone of 1 mg/kg with a maximum of 60mg.

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