Ocular Melanocytosis

- **Case Description**
  - 15-year-old boy with increased pigmentation of his right eye present since birth
- **Image Description**
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  - diffuse episcleral pigmentation with dark brown iris
- **Differential Diagnosis**
  - ***ocular melanocytosis***
    - from birth
    - increased pigmentation at puberty
    - 5% bilateral
  - ***pigment spot of the sclera***
    - collection of melanocytes associated with an intrascleral nerve loop or perforating anterior ciliary vessel
  - ***conjunctival nevus/ melanoma***
  - ***PAM***
  - ***CAM***
    - move with conjunctiva
  - ***uveal melanoma with extraocular extension***
- **Data acquistion**
  - History
    - time of onset
      - ★ review old photos
    - change in pigmentation
    - race
      - CAM
    - other family members
      - CAM
  - Physical Exam
    - temple pigmentation
    - lid pigmentation
    - palate pigmentation
    - pigmetation
      - flat or raised
      - movement with conjunctiva
        - conjunctival vs. episcleral
          - melanocytosis does not move with the conjunctiva
    - dilated (sentinel) episcleral vessels
      - ciliary body melanoma with extraocular extension
    - ★ IOP
      - 10% of patients with ocular melanocytosis can develop secondary glaucoma
    - slit lamp exam
      - iris pigmentation (melanocytosis)
      - iris melanoma
    - dilated fundus exam
      - ★ C/D ratio
      - choroidal pigmentation (melanocytosis)
      - posterior uveal melanoma
    - examine both eyes
      - CAM and pigment spots of sclera are more likely to be bilateral
- **Patient Education**
  - Prognosis & Complications
    - risk of developing uveal melanoma
      - 1/400 lifetime risk
      - 10%
        - glaucoma
    - risk of developing extraocular melanoma
      - orbit
      - brain
  - Follow-up
    - complete eye exam every visit
      - q1 year
      - monitor for glaucoma
      - monitor for melanoma
- **Treatment**
  - observation
    - monitor for change
  - baseline photos
- **Assessment**
  - ocular melanocytosis
- **Additional Testing**
  - B-scan if fundus view not adequate ★

Ophthalmology Mind Maps/Arman Mashayekhi, MD