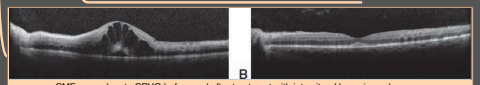
Pharmocologic Management of Retinal Vein Occlusion

Intravitreal corticosteroids

- Risks
  - cataract
  - 20-65% elevated IOP
- SCORE study
  - CME secondary to BRVO/CRVO indication
  - intravitreal triamcinolone vs standard care (macular grid laser)
    - comparable to macular grid laser with respect to ≥3 lines of visual acuity gain
  - ≥15 ETDRS letter improvement at 1 year CRVO arm
    - 27% 1 mg triamcinolone
    - 26% 4 mg triamcinolone
    - 7% observation
  - because of steroid complications the investigators concluded that macular grid laser remained the benchmark against which other treatments should be compared
- GENEVA study
  - CME secondary to BRVO/CRVO indication
  - intravitreal dexametasone implant (0.7 mg) vs sham
  - greatest response at 60 days ≥15 ETDRS letter improvement between 30-90 days
  - at day 180 there was no significant difference between sham and treatment groups
- COMRADE Study
  - CME secondary to CRVO indication
  - dexamethasone 0.7 mg vs monthly ranibizumab
  - results were similar first 3 months
  - ranibizumab group had better visual acuity scores at months 4-6
  - ETDRS letters gained at month 6
    - 12.86 for ranibizumab
    - 2.96 for dexamethasone implant

Intravitreal anti-VEGF therapy

- BRAVO study
  - indication CME secondary to BRVO
  - monthly ranibizumab (0.3 mg or 0.5 mg) vs sham
  - at 6 months gain of ≥15 ETDRS letters
    - 61.1% ranibizumab (0.3 mg)
    - 55.2% ranibizumab (0.5 mg)
    - 28.8% sham
- CRUISE study
  - indication CME secondary to CRVO
  - monthly ranibizumab (0.3 mg or 0.5 mg) vs sham
  - at 6 months ≥15 ETDRS letters
    - 47.7% ranibizumab (0.3 mg)
    - 46.2% ranibizumab (0.5 mg)
    - 16.9% sham
- VIBRANT study
  - intravitreal aflibercept for CME secondary to BRVO
- COPERNICUS study
  - intravitreal aflibercept for CME secondary to CRVO
- GALILEO study
  - intravitreal aflibercept for CME secondary to CRVO
- benefits were maintained during the second 6 months of these studies (as needed treatment)
- SCORE2 study
  - indication CME secondary to CRVO
  - bevacizumab noninferior to aflibercept
- CRAVE study
  - indication CME secondary to BRVO and CRVO
  - monthly bevacizumab vs ranibizumab for CME secondary to BRVO/CRVO
  - no significant differences in central foveal thickness reduction or visual acuity improvement



CME secondary to CRVO before and after treatment with intravitreal bevacizumab
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Ophthalmology Mind Maps
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