Retina Grand Rounds

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Abstract

This course will use cases to discuss how to diagnose, treat and follow different retinal diseases. Both peripheral pathology and some central pathology will be discussed in a practical sense.

Objectives:
1. Identify some common posterior segment diseases that are likely to be seen by practitioners.
2. Show examples of different imaging technologies and how they are used to find and/or follow retinal disease.
3. Use case reports to demonstrate protocols and how patients are taken care of from initial exam until resolution and beyond.
4. Discuss treatment strategies, based in science for these posterior segment problems.
5. Discuss appropriate referrals for pathology found, whether it be to another eye care provider or somebody for systemic care.
6. Discuss patient education strategies to make sure that patients understand findings.

Outline:

Retinal examination

Clinical exam

- 90/20D vs newer technology lenses
  - Enhancement of field of view: widefield lenses
  - Increased magnification: Digital hi-mag lenses

- Scleral depression

Technology in clinical practice

- Traditional fundus photos
- Widefield photography
- Optical Coherence Tomography
- Multispectral imaging
Disease state specific technology

Dark Adaptation

Macular pigment density

Other emerging technologies.

Masses and pigmented lesions

Choroidal nevi

Prevalence and incidence

Description

Conversion to Melanoma

Factors considered by Shields

Easy to remember mnemonic: TFSOM and easily documented

Choroidal Melanoma

Appearance and diagnostic criteria

Treatments

Metastasis and survival

Metastatic disease

Where lesions come from

Where choroidal lesions go

Appearance and modalities used to diagnosis

Treatments: ocular and systemic

Side affects of systemic cancer treatment

Neurologic disease

Brain tumor manifestation as optic nerve edema

Appropriate referral and timeliness

Peripheral retinal disease

PVD and its relevance to pathology

Treatment and follow-up for PVD
Vitreous heme related to PVD

Classifications of breaks

Flap tears
  Diagnosis, implications and treatment

Atrophic holes
  Diagnosis, implications and treatment

Retinal detachments

Rhegmatogenous vs non

Criteria for treatment
  Macula on vs off
  Location of detachment: superior vs inferior

Treatment options
  Surgical: scleral buckle vs vitrectomy
    Primary success rates
    Potential complications: including re-detachment
  Laser: laser vs pneumatic retinopexy

Lattice degeneration

When is treatment necessary

Statistics around lattice degeneration and RD

Potential treatment strategies

Patient education

Vitreomacular traction

Definition of VMA vs VMT
  Clinical appearance of each and how may affect vision

How to diagnose: clinically and using technology

Monitoring: timing and techniques
Treatment options

Treatment criteria for vitrectomy

Treatment criteria for Jetrea: driving success

Size, lens status, age and vision

White dot syndromes

APMPPE

Specific characteristics

Treatment vs observation

MEWDS

Specific characteristics

Treament vs observation

Others

Specific characteristics: How to differentiate

Treatment vs observation and referral patterns

Plaquenil

2016 revised guidelines

Imaging: mfERG vs FAF vs OCT

Screening guidelines

What to do if toxicity is found

Acute care

Systemically related

Systemic care vs retinal care

Hypertensive crisis

Diabetes related complications

Decision making tree

Does the patient need treatment

If so, is it a treatment that “I” can provide
Applying decision making and patient education