MODUL
PROBLEM BASED LEARNING
KELAS REGULER
SISTEM INDRA KHUSUS

- Modul Gangguan Penglihatan

- Modul Mata Merah

Diberikan Pada Mahasiswa Semester V
Fakultas Kedokteran Unhas

Fakultas Kedokteran
Universitas Hasanuddin
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MODUL MATA (Tutorial 5 & 6)

SPECIAL SENSE SYSTEM
OPHTHALMOLOGY MODULE

CASE 1

A 66 year old man was diagnosed as Senile Cataract + Diabetic Retinopathy (ODS), based on these findings :

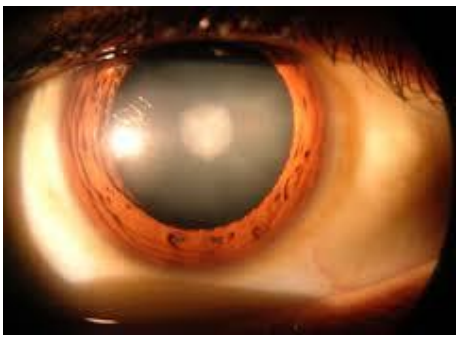
History: A chief complain of decreased vision on both eyes, aware since ± 8 months ago and worsened for the past 4 weeks. Vision appears to be white, hazy smoke-like and seems to be clearer during night time. There was no history of using spectacles for distant vision, and neither of red eyes or trauma of the eye balls. There is a history of hypertension for about 10 years with improper treatment, diabetic mellitus diagnosed 4 years ago with HbA1C 7gr%, treated with oral hypoglycemic theraphy.

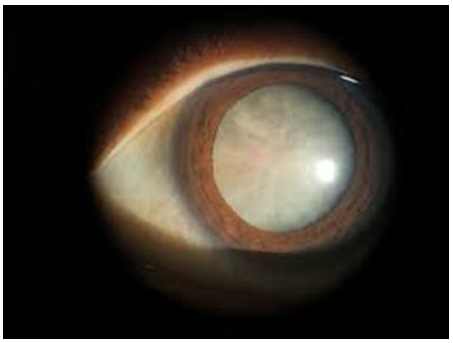
Physical findings: General state : Mild / Good nutrition / Conscious

- **Vital signs : BP** = 180/90 mmHg; **Pulse** = 80 x/mnt, **Breathe**= 20x/mnt; **Temp** = 36,7^{o} C
- **Ophthalmology findings :**
  VOD = 3/60; could not be corrected VOS= 1/60; could not be corrected
- Anterior Segment :

Eye	OD	OS
Palpebra	Normal	Normal
Cilia	Normal	Normal
Bulbar conjunctiva / Palpebral conjunctiva	Normal/ Hyperemic(-)	Normal/ Hyperemic(-)
Cnea	Clear	Clear
COA	Normal	Normal
Iris	Dark brown, crypt(+)	Dark brown, crypt(+)
Pupil	Round, central, light reflex (+)	Round, central, light reflex (+)
Lens	Opaque	Opaque, dense

OD OS





Biomicroscopic view of eyes with dilated pupils

- Posterior Segment :
    - FOD : fundus reflex (+), Optic nerve : fine edge, CDR 0,3, A/V : 1/3, Macula : fovea reflex(+), peripheral retinal within normal limit
    - FOS : fundus reflex (+), Optic nerve : fine edge, CDR 0,3, other details are difficult to evaluate due to dense cataract.
- Lab findings, biometry

Diagnose : ODS Mature Senile Cataract + Diabetes Mellitus

- Treatment plan :
    - Cataract extraction + IOL implant (Intra Ocular Lens) ODS
    - control blood glucose and pressure

<u>EACH STUDENTS ARE ASSIGNED TO</u> :

1. **OUTLINE A MIND MAP OF SENILE CATARACT.**
2. **DESCRIBE RISK FACTORS, PATHOPHYSIOLOGY OF SENILE CATARACT**
3. **DESCRIBE CLINICAL MANIFESTATION OF CATARACT, INCLUDING SIGNS AND SYMPTOMS**
4. **DESCRIBE TREATMENTS, POSSIBLE COMPLICATIONS AND ITS PROGNOSIS**
5. **PRESENT AND DISCUSS THIS CASE IN CLASS**

PROBLEM BASED LEARNING MODULE
SHORT OBJECTIVE ORAL CASE ANALYSIS EXAM
SPECIAL SENSE SYSTEM

CASE 2

A 20 year old woman was diagnosed with anterior uveitis, due to:

History taking :

Major complaint was red and painful right eye, which since 1 week prior to visit, first symptom was mild pain which developed progressively until admitted. She also complaint of excessive tearing, glare and blurred vision on her right eye. No previous history of trauma, systemic illness nor ocular surgery. No history of spectacle uses and other ocular diseases.

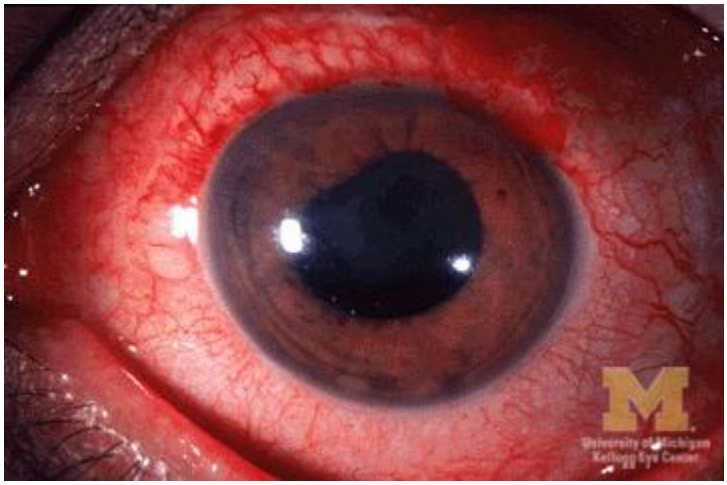
Pemeriksaan Fisik : Keadaan Umum : Sakit sedang / Gizi baik/ sadar

- Vital sign : TD = 120/80; Nadi = 80x/mnt; Pernapasan= 20x/mnt; Suhu= 37,1^{o}C

- Pemeriksaan Oftalmologi :
  - Visual Acuity :
    - OD : 3/60 Counting finger
    - OS : 20/20
  - Intraocular Pressure : OD : Tn OS : Tn
  - Segmen Anterior :

Structures of the eye	**OD**	**OS**
Palpebra	Normal	Normal
Cilia	Normal	Normal
Konjungtiva bulbi/ Konjungtiva palpebral	Hyperemis, conjunctival injection (+), pericorneal injection (+)	Normal/ normal
Cornea	Slightly hazy,diffuse Keratic Precipitate (+)	Clear

COA	AC (+), flare grade (+2)	Normal
Iris	Bombae Segmental posterior synechiae	Brown, crypte(+)
Pupil	Irregular shape	Round, light reflex(+)
Lens	Clear	Clear



Posterior segment :

FOD : Due to unclear media, posterior segment could not being evaluated

FOS : red reflex (+), fine edges of optic nerve, CDR normal, fovea reflex (+).

Laboratory findings : Leucocytosis (14.000 /ul), elevated ESR/LED

Diagnose : Anterior Uveitis

STUDENTS ARE ASSIGNED TO :

1. **OUTLINE A MIND MAP FOR THE CASE ABOVE**
2. **DESCRIBE THE ETHIOLOGY AND PATHOPHYSIOLOGY OF THE CASE**
3. **DESCRIBE CLINICAL MANIFESTATION OF ANTERIOR UVEITIS, INCLUDING ITS SIGNS AND SYMPTOMS**
4. **DESCRIBE THE DIFFERENTIAL DIAGNOSE OF ANTERIOR UVEITIS**
5. **DESCRIBE ITS MANAGEMENT AND PROGNOSIS**
6. **PRESENT AND DISCUSS THIS CASE IN A GROUP**

PROBLEM BASED LEARNING MODULE
SHORT OBJECTIVE ORAL CASE ANALYSIS EXAM
SPECIAL SENSE SYSTEM

Case 3

Seorang perempuan, 24 tahun di diagnosis dengan **OS Rhegmatogenous Retinal Detachment**, **ODS Miop Gravior** yang didiagnosis berdasarkan :

History taking:
Keluhan utama berupa penglihatan mata kiri tiba-tiba gelap yang dialami sejak 1 hari yang lalu, daerah lapang pandangan bagian bawah tidak terlihat. 2 hari sebeluimnya pasien merasa seperti melihat kilatan cahaya, mata merah (-), nyeri(-). Penglihatan kedua mata kabur dialami sejak masih SMP, menggunakan kacamata sejak kelas 2 SMP. Riwayat mata merah (-) Riwayat trauma (-), riwayat pasien melihat seperti pelangi (-), melihat kilatan cahaya (+). Tidak ada riwayat penggunaan obat tetes mata sebelumnya, riwayat alergi, asma, HT dan DM disangkal

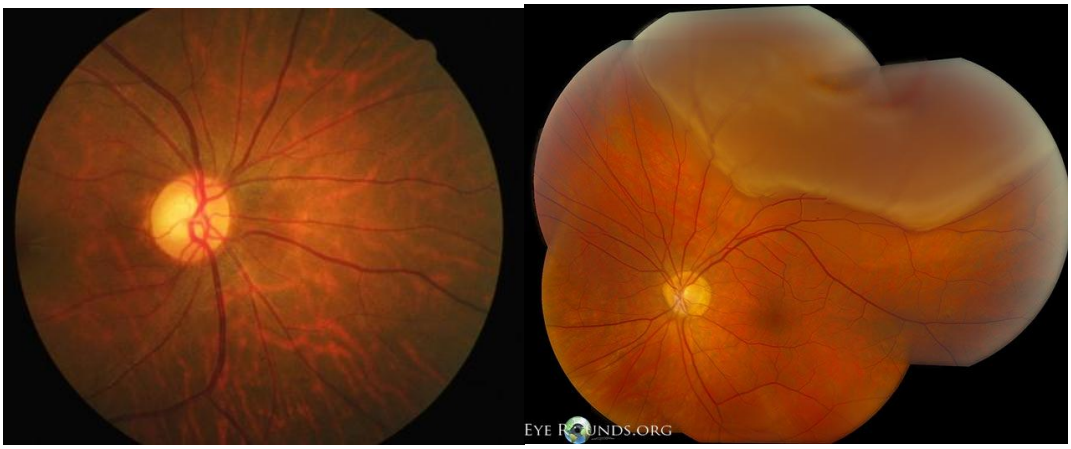
PemeriksaanFisik :
Keadaan Umum : Sakit sedang / Gizi baik/ sadar

- Vital sign : TD = 130/80; Nadi = 80x/mnt; Pernapasan= 20x/mnt; Suhu= 37,1^{o}C

Pemeriksaan Oftalmologi :

- Visual Acuity :
  - OD : 2/60 ∫-9.50 D → 20/25
  - OS : 1/60 tidak dapat dikoreksi
- Intraocular Pressure : OD : 14 mmHg OS : 9 mmHg
- Segmen Anterior :
  OS : RAPD (+)

Structures of the eye	**OD**	**OS**
Palpebra	Normal	Normal
Cilia	Normal	Normal
Konjungtiva bulbi/ Konjungtiva palpebral	Normal/ normal	Normal/ normal
Cornea	Jernih	Jernih
COA	Normal	Normal
Iris	Coklat, kripte (+)	Coklat, kripte (+)
Pupil	Bulat, reflek pupil (+)	Bulat, reflek pupil (+)lambat
Lens	Jernih	Jernih



Posterior segment :

FOD : Refleks fundus (+), Papil nervus II, batas tegas, CDR 0,3, a/v : 2/3, Refleks fovea kesan normal, Retina perifer kesan tipis, fundus tigroid (+)

FOS : Refleks fundus (+), Papil nervus II, batas tegas, CDR 0,3, a/v : 2/3, Refleks fovea kesan normal, Retina perifer : tampak retinal detachment di kuadran superior retina dari arah jam 11 hingga 2, vaskularisasi (+), giant horseshoe tear diarah jam 12.

Hasil Lab : dalam batas normal

Diagnosis : ODS MIop Gravior + OS Rhegmatogenous Retinal Detachment

STUDENTS ARE ASSIGNED TO :

1. **OUTLINE A MIND MAP FOR THE CASE ABOVE**
2. **EXPLAIN THE ANATOMY OF RETINA**
3. **DESCRIBE THE PATHOPHYSIOLOGY AND CLASSIFICATION OF THE RETINAL DETACHMENT**
4. **DESCRIBE SIGNS AND SYMPTOMS OF DR AND EXPLAINE THE MECHANISM OF PATHOLOGICAL SYMPTOMS**
5. **DESCRIBE THE DIFFERENTIAL DIAGNOSE OF THIS CASE**
6. **DESCRIBE ITS TREATMENT, PROGNOSIS, COMPLICATION AND REHABILITATION ON THIS CASE**
7. **PRESENT THIS CASE**