# NURSING STUDIES

2nd Year

# PATHOLOGY AND THERAPEUTICS COURSE

### Pathology: 10.00-1.00 p.m.

# 17th Jan. 1983.

Pathology of the genito-urinary tract. The formation of urine. Renal clearance and threshold. The role of the kidney in hypertension. The effects of renal damage on excretory function. Renal function tests. Common symptoms of renal tract disease.

# Therapeutics: 2.30-4.00 p.m.

Acid-base balance - acidosis and alkalosis.

# 24th Jan.

The pathology of the male and female reproductive tracts.

Common symptoms of genital disorder.

Social aspects of female reproductive disorder; the menopause.

Oral contraception.
Use of oestrogens in carcinoma of the prostate.
Hormone replacement therapy in the menopause.
Bromocriptine, Danazol.

# 31st Jan.

Pathology of the endocrine glands. Special reference to diabetes mellitus. Alternative medicine.

7th Feb. ) 14th Feb. ) Study Days. Treatment of diabetic ketosis. Insulin. Oral hypoglycaemic agents. Placebos and placebo effect.

#### 21st Feb.

Pathology of the haemopoietic system. The testing and production of drugs. Iatrogenis. Screening.

Preparations of iron.
Treatment of malignant disease.
Compliance.

# 28th Feb.

The marketing of drugs.
Disease and the environment.
Chronic prescribing; the doctor and patient.

Narcotic analgesics. The Misuse of Drugs Act, 1971.

7th March. "Mock" examination.

#### 14th March.

Discussion of examination paper.
Pathology of the musculo-skeletal system.
Special reference to rheumatoic arthritis.
Pathology of skin diseases; diseases of the eye and ear.

The treatment of rheumatoid arthritis. Gold salts.

<u>21st March</u>: All-day visit to the Bland-Sutton Institute of Pathology, Middlesex Hospital.

#### DISEASES OF THE EAR

# 1. Otitis Externa

A bacterial infection of the skin of the external meatus. Secondary to otitis media, or eczema. Fungi (monilia/candida) and viruses (herpes zoster) can also cause otitis externa.

#### 2. Acute Otitis Media

A bacterial infection of the middle ear.
Usually occurs as a complication of tonsillitis, pharyngitis, influenza, measles or the common cold.
The middle ear is full of pus, which may perforate the tympanic membrane. The condition is acutely painful and treatment is by antibiotics.

# 3. Chronic Otitis Media

May follow acute otitis media. The infection continues with a chronic "wet" ear with aural discharge.

# 4. Mastoiditis

Extension of bacterial inflammation from the middle ear to the mastoid air cells. Untreated mastoiditis may extend through the bone internally to cause meningitis or an epidural abscess.

### 5. Labyrinthitis

Inflammation of the labyrinth of the ear, due to either bacteria or virus infection. May cause severe vertigo and vomiting.

#### 6. Ménière's Disease

A condition of unknown actiology which causes sudden attacks of giddiness, vomiting and tinnitus, accompanied by some degree of deafness.

# DISEASES OF THE EYE

# 1. Stye

Bacterial infection of the eyelash follicle and gland.

# 2. Chalazion

Chronic granuloma of an obstructed Meibomian gland.

# 3. Simple Bacterial Conjunctivitis: "Pink-Eye"

The eye feels "gritty", and the conjunctiva is inflamed, sometimes with a purulent exudate. Local antibiotics only are required.

# 4. Corneal Ulceration

Bacterial or viral ulceration of the cornea (e.g. herpes zoster). Can cause scarring with resultant clouding of the cornea.

# 5. Cataract - Opacity of the Lens.

- (a) Congenital e.g. maternal rubella infection.
- (b) Senile
- (c) Diabetic.

# 6. Hypertensive Retinopathy

The central artery of the optic nerve becomes subject to atheromatous change, causing a diminished oxygen supply to the retina.

### 7. Diabetic Retinotopathy

Abnormal proliferation of new blood vessels and capilleries eventually leads to retinal detachment and degeneration.

#### 8. Glaucoma

Failure of normal drainage mechanisms of the aqueous humour, leading to raised intra-ocular pressure and subsequent ocular damage.

Can occur secondarily to previous intra-ocular disease or trauma.

Prolonged raised intra-ocular pressure causes atrophy of the iris, ciliary body and retina due to ischaemia. Cataract also occurs.

Untreated glaucoma will result in blindness.

### 9. Optic Atrophy (atrophy of optic nerve)

- (1) Optic neuritis (a) secondary to pyogenic infection, e.g. meningitis.
  - (b) multiple sclerosis.
- (2) Trauma
- (3) Glaucoma
- (4) Central retinal artery thrombosis, e.g. atheroma.
- (5) Papilloedema.
- (6) Poisons, alcohol and tobacco.

- Papilloedema (oedema of the optic disc): 10.
  - (i) raised intra-cranial pressure, e.g. tumours.(ii) optic neuritis.

(iii) malignant hypertension.

(iv) venous drainage obstruction, e.g. by tumours; papilloedema results in deterioration of vision, and eventually optic atrophy occurs.