

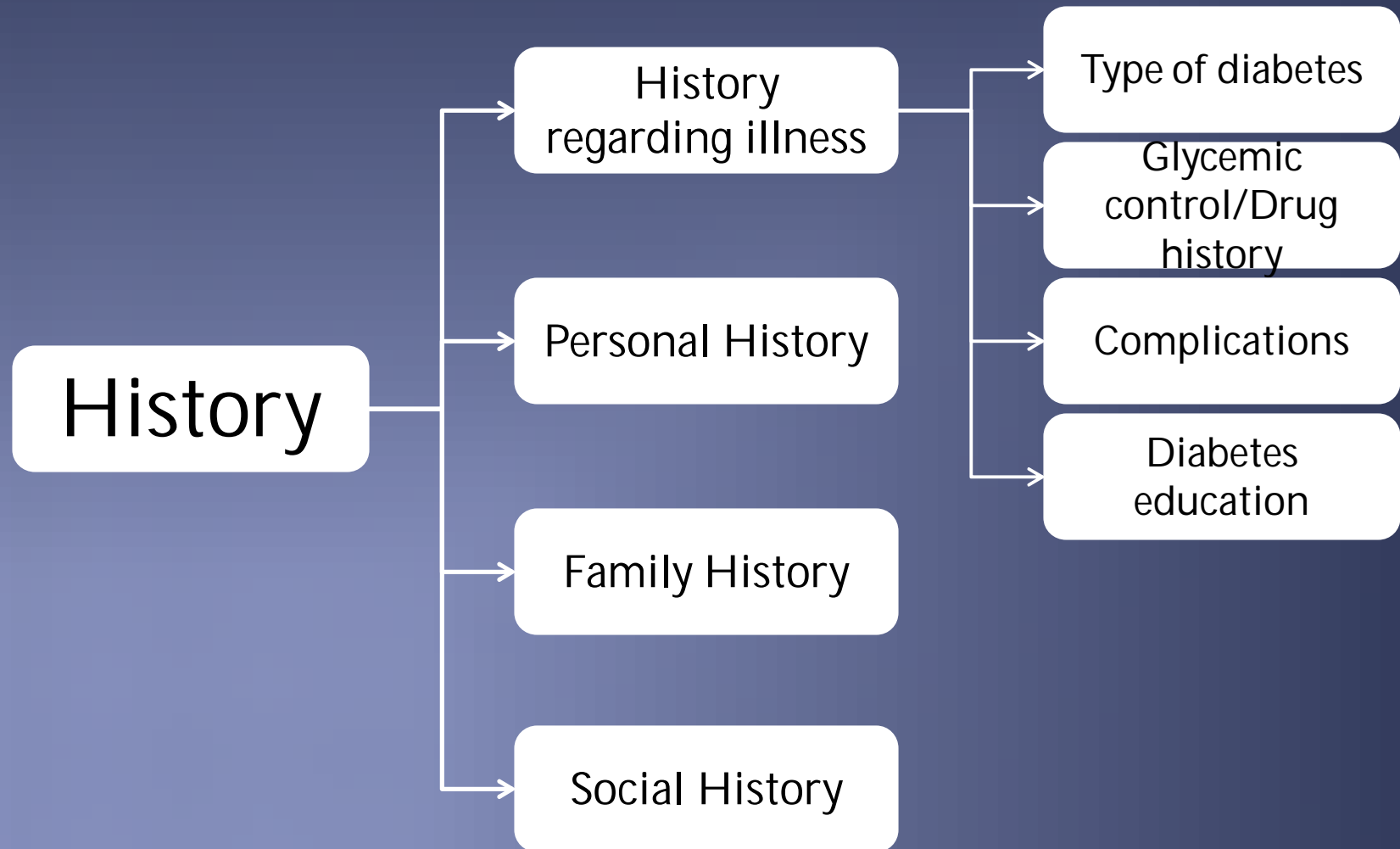


# HISTORY TAKING AND CLINICAL EXAMINATION IN A PATIENT WITH DIABETES

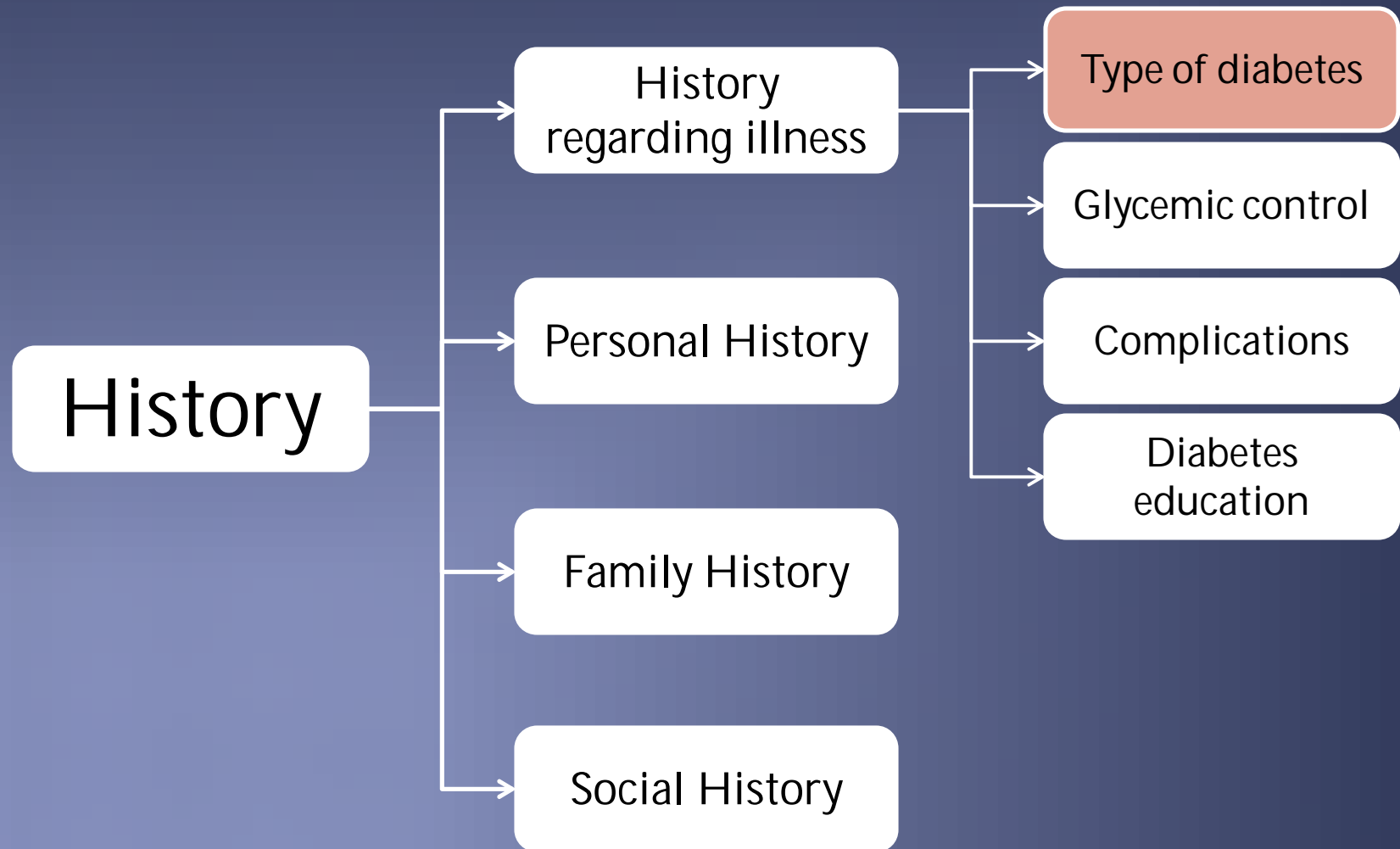
# Introduction

- Skilled history taking is reported to be declining.
  - the core art of patient care
  - vital piece of the physician-patient encounter
  - Helps lead to the final diagnosis about 75% of the time
  - Listening is in and of itself a major therapeutic act and the physician himself is a great therapeutic instrument.

# History in a diabetes patient



# History in a diabetes patient



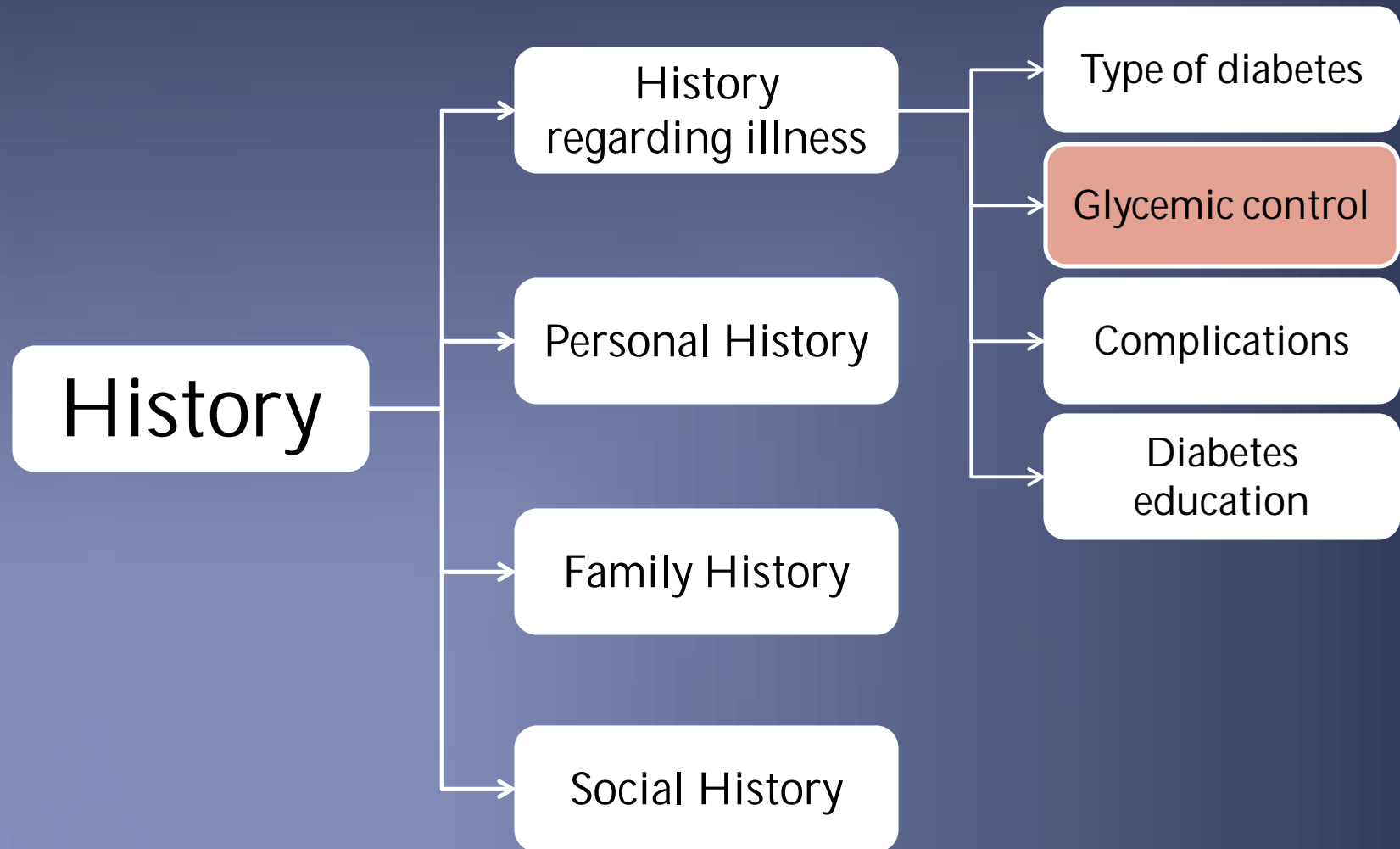
# History for type of diabetes

- Type 1
- Type 2
- Secondary
  - Pancreatic
  - Endocrine
  - Drugs
- MODY
- Rare forms of diabetes

# History for type of diabetes

- Onset of symptoms at diagnosis
- Weight prior to diagnosis
- Blood glucose values and ketones at diagnosis
- Methods used for glycemic control
- Insulin dependancy for survival
- Other autoimmune diseases
- Family history
- Abdominal pain, malabsorption, Cushing's and acromegaly.

# History in a diabetes patient

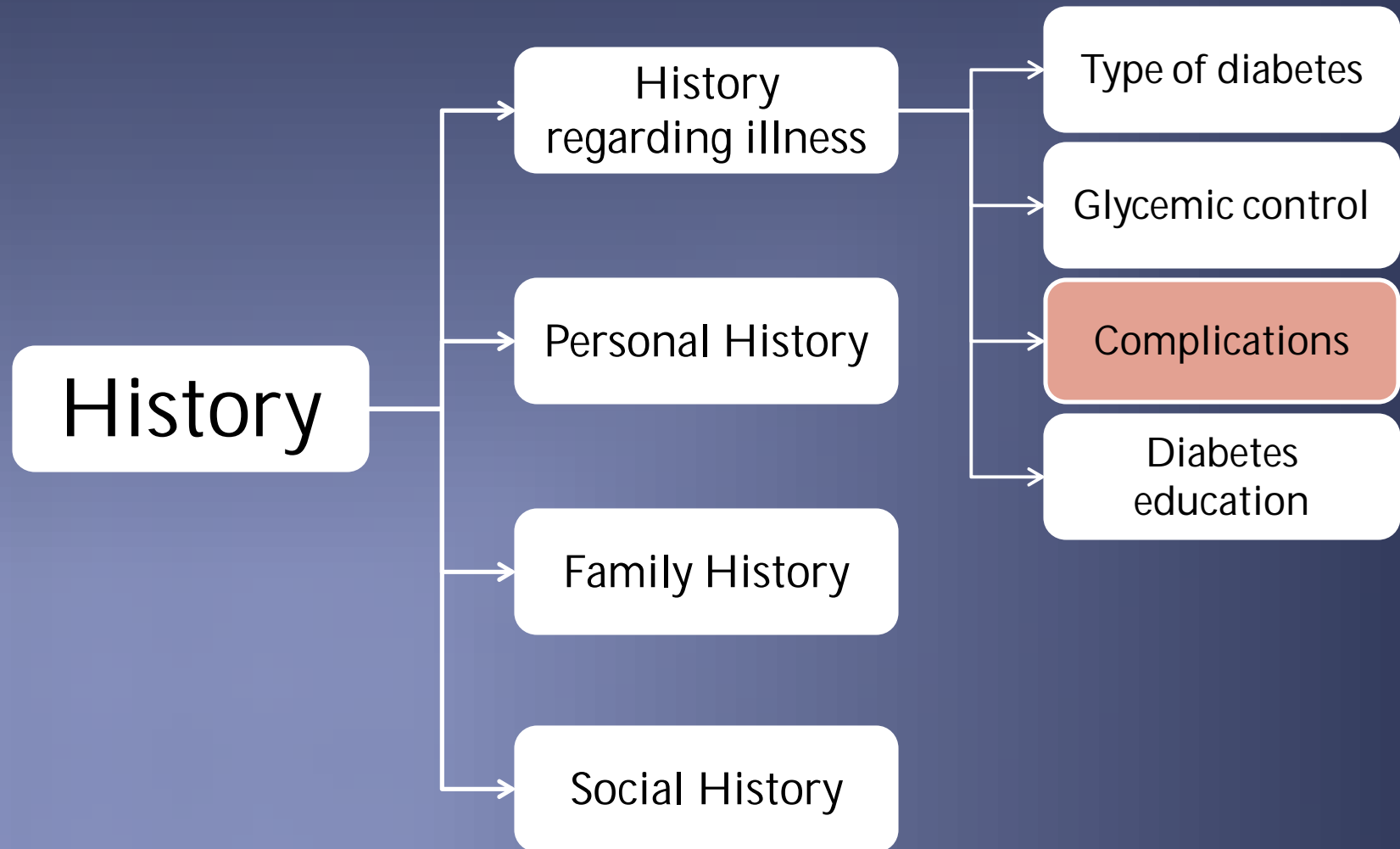


# History for glycemic control

- Method of monitoring blood glucose
  - Glucometer
  - Laboratory
  - Glycated hemoglobin
- Hyperglycemia
  - Ongoing osmotic symptoms and weight loss
  - Admissions for hyperglycemic crises
- Hypoglycemia
  - Duration, timing, severity, documentation, relief, dietary pattern



# History in a diabetes patient



# History for complications

- Microvascular
- Macrovascular
- Nonretinal ocular
- Gastrointestinal
- Musculoskeletal
- Infective
- Neuropsychiatric

# Microvascular

- Retinopathy
  - Decreased visual acuity, sudden onset of visual loss, H/O floaters, previous laser treatment, headache
- Nephropathy
  - Frothing of urine, recent onset hypertension, recent onset hypoglycemia
- Somatic Neuropathy
  - Positive and negative sensory symptoms, motor symptoms, foot ulcers, oculomotor and truncal symptoms, difficult in walking in darkness

# Microvascular

- Autonomic neuropathy
  - Cardiovascular (silent MI, orthostatic dizziness)
  - Urogenital (increased intervals between micturition, hesitancy and poor stream, erectile dysfunction)
  - Gastrointestinal (nausea, early satiety, recent onset hypoglycemias, vomitus containing fewdays old food material, diarrhea, constipation)
  - Sudomotor (dry skin, increased sweating especially in head/trunk, gustatory sweating)

# Macrovascular

- Coronary artery disease
  - Angina, dyspnea/orthopnea/PND, pedal edema, easy fatiguability
- Cerebrovascular disease
  - TIA, RIND, stroke, dementia, transient monocular blindness
- Peripheral vascular disease
  - Claudication pain, foot ulcers (site, pain, gangrene, amputations), mesenteric ischemia, impotence

# Nonretinal ocular

- Ocular mononeuropathies
  - drooping eyelids, double vision
- Corneal
  - Corneal sensitivity (contact lens)
- Glaucoma
  - Headache, vomiting, ocular pain, colored haloes around lights
- Lens
  - Frequent refractory shifts
- Optic disc
  - Peripheral field constriction and acuity

# Gastrointestinal

- Dysphagia
  - uncommon due to diabetes per se
- Gastroparesis
- Diarrhea
  - Nocturnal, watery, usually without pain abdomen
  - Fecal incontinence
- Abdominal pain
  - Site, duration, nature, relieving factors

# Infective

- Urinary tract infection
  - Dysuria, loin pain, high grade fever, passing of fleshy material in urine, hematuria
- Genital infection
  - Itching in the genitalia, vulval erythema and white discharge in females, congestive dysmenorrhea
- Upper respiratory
  - Nasal block, pain over sinuses
- Lower respiratory
  - Cough, sputum, hemoptysis, fever, weight loss



# Cutaneous

- Infective
  - Sore mouth, pruritic skin patches especially web spaces, thick roughened discolored nails
- Poor wound healing
- Foot ulcers
  - Area, pain, swelling, redness and fever
- Injection sites
  - Localised swelling, pain or anaesthesia

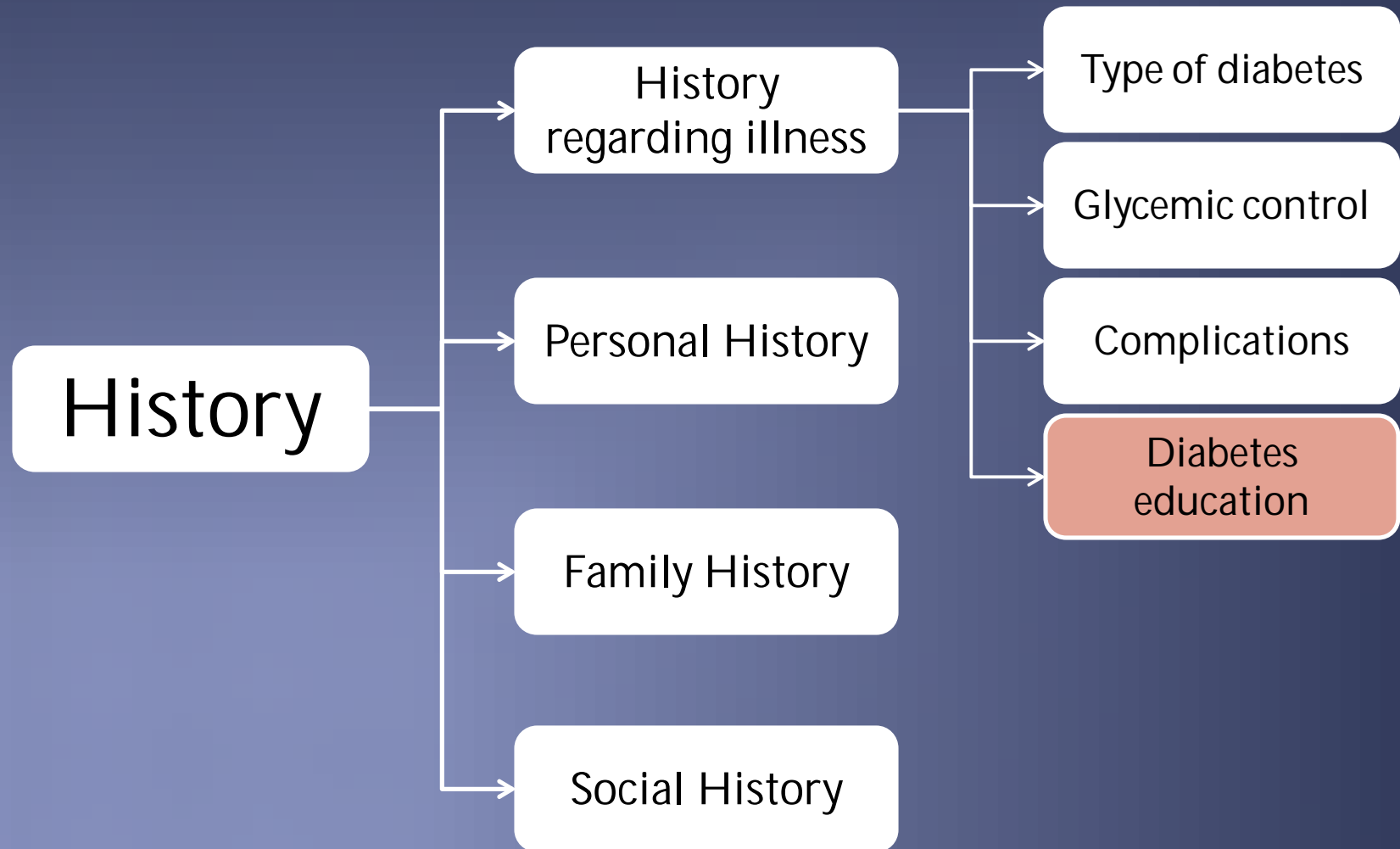
# Musculoskeletal

- Periarthritis shoulder
  - Pain and limitation of movements
- Cheiroarthropathy
  - Stiffness and limited mobility of fingers
- Neuroarthropathy
  - Painless unilateral swelling of foot and ankle
- Spinal hyperostosis
  - Mild back pain with preservation of back movements

# Neuropsychiatric

- Dementia
  - Memory status
- Motor difficulties
- Depression

# History in a diabetes patient



# History for assessing diabetes education

- Glycemic control
  - Targets for blood glucose values and glycated Hb
- Medications
  - Timing of OHA intake
  - Insulin
    - » Storage (Refrigerator/mud pot)
    - » Bringing to room temperature
    - » Method of mixing insulin
    - » Timing between meals and injection
    - » Site and rotation
    - » Injection technique (angle, skin fold, bleb after injection, counting after injecting by pen, change and disposal of needles)

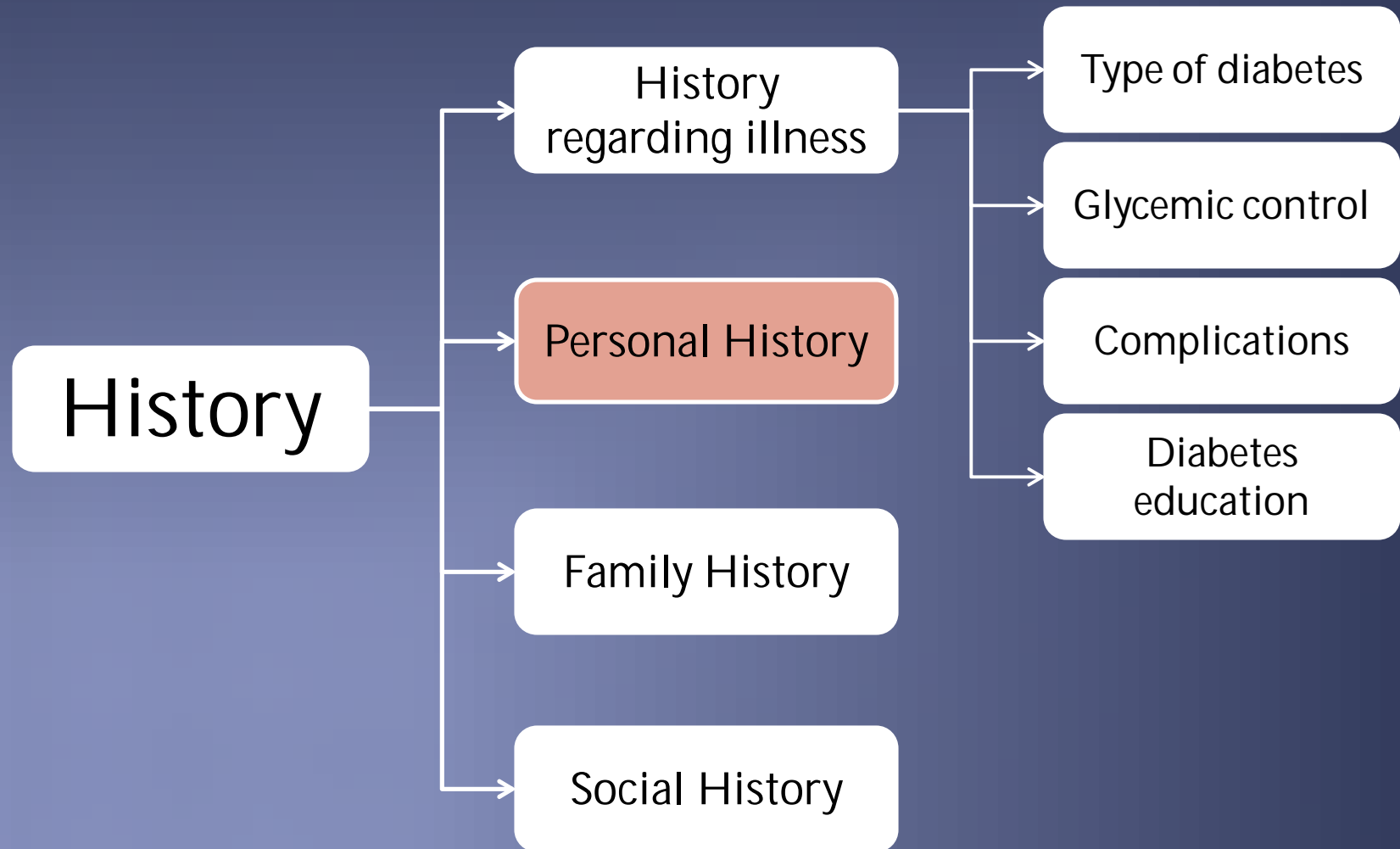
# History for assessing diabetes education

- Hypoglycemia care
  - Symptoms, glucose, candies and not chocolates
- Sick day rules
  - Fluids, glycemia and ketone monitoring, insulin dose adjustment and when to contact the diabetic team
- Complications
  - Awareness regarding all the complications of diabetes and their relation to glycemic control
  - Periodic monitoring for complications

# History for assessing diabetes education

- Foot care
  - Type of foot wear and socks, bare foot walking, care of foot
- Pregnancy
  - Maternal and fetal morbidity, planning pregnancy and prepregnancy blood glucose /HbA1C goals, contraception methods

# History in a diabetes patient

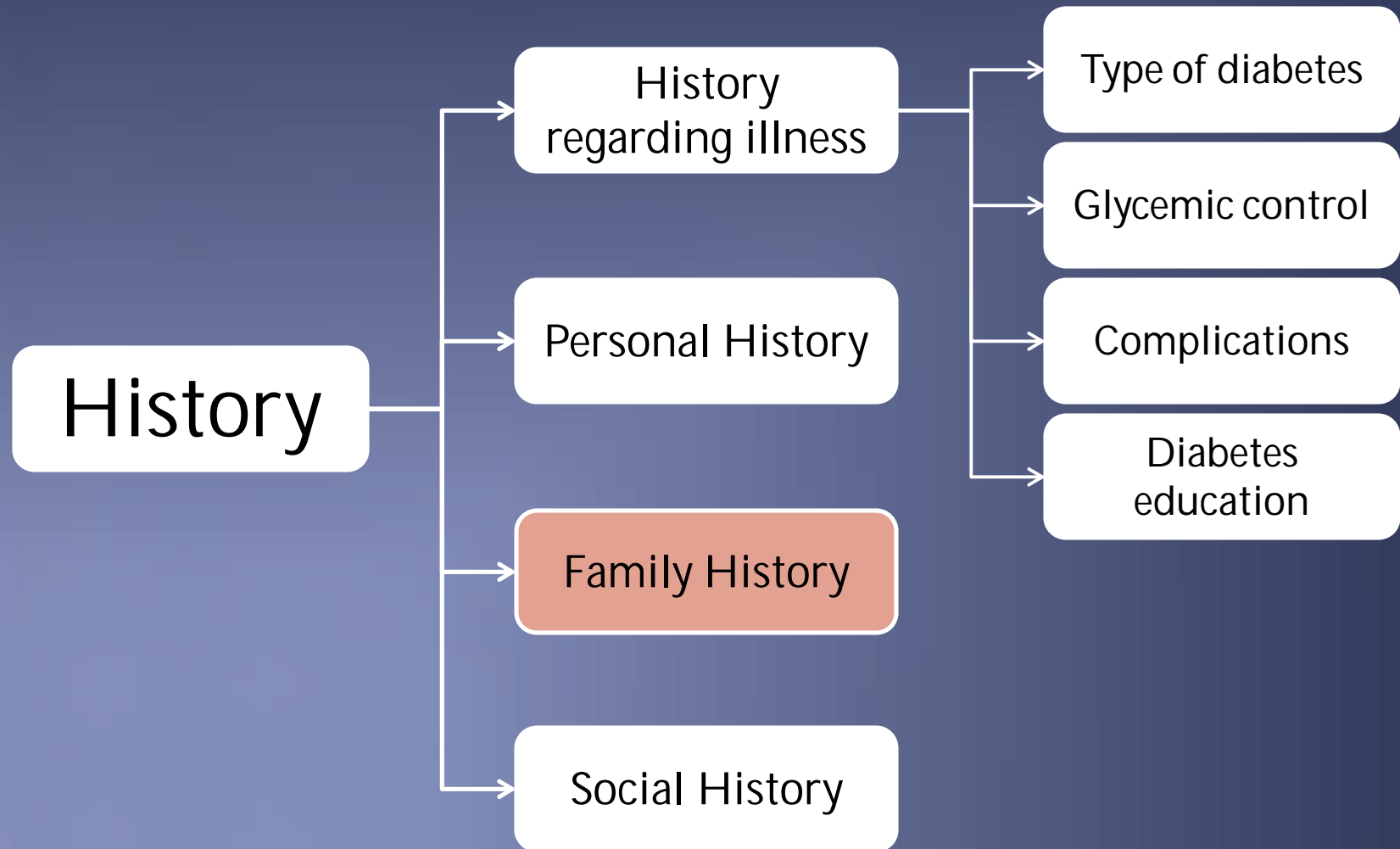




# History regarding lifestyle

- Type of food taken over the whole day including snacks – calorie, carbohydrate and protein
- Nonvegetarian
- Milk – Type of milk used
- Artificial sweeteners
- Food exchanges
- Adequate amount of fruit and vegetables
- Amount of oil and ghee used per month per member of the family
- Physical activity – in working place, leisure activities and exercise pattern

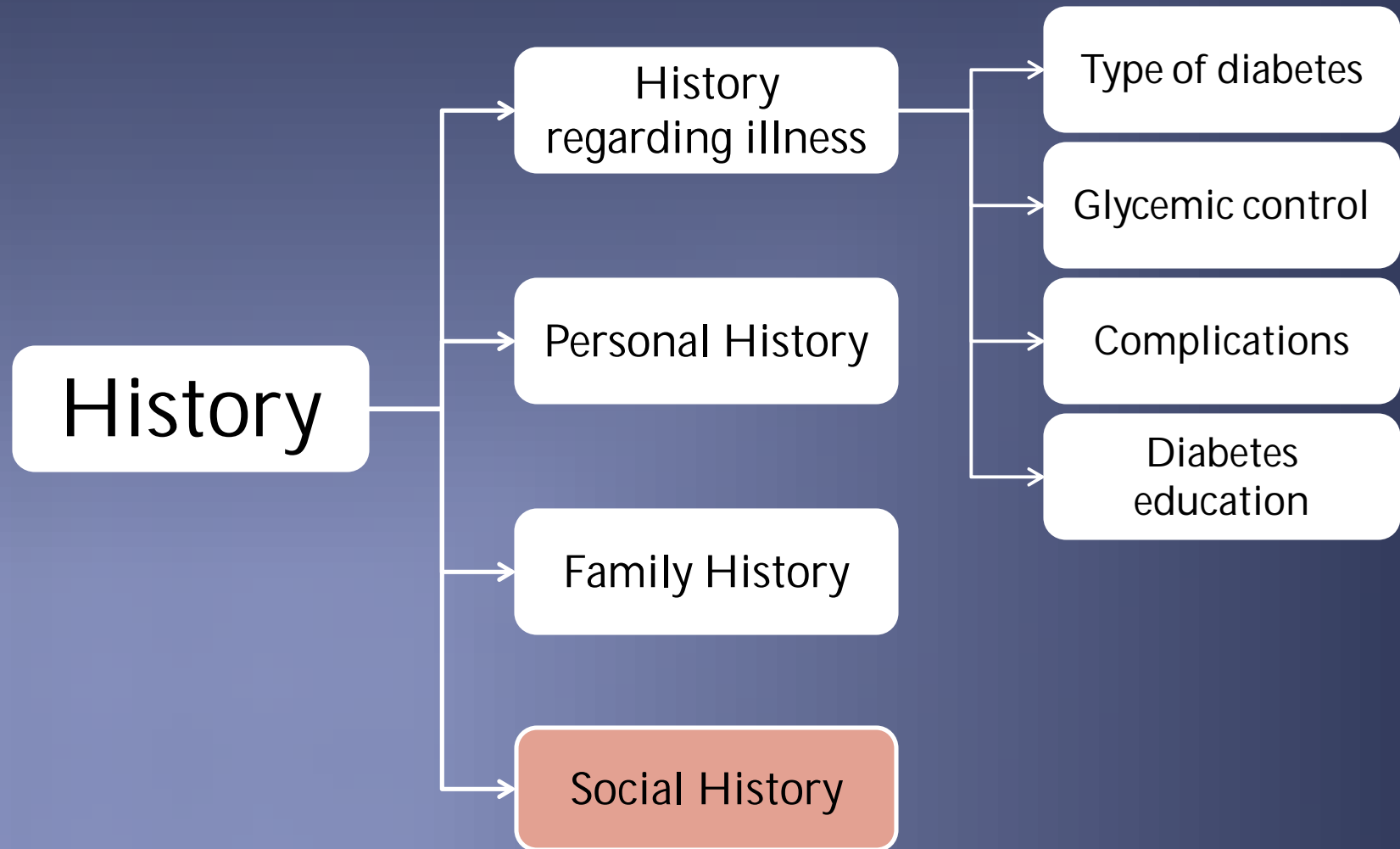
# History in a diabetes patient



# Family history

- Generations affected
- Earning member of the family
- Financial support for getting medications and following diet
- Emotional support from family
- Incorporating life style changes in the younger family members

# History in a diabetes patient



# Social history

- Pattern of school or working
- Information to responsible persons regarding the disease
- Difficulties in transporting and storing insulin in work place
- Stigmas regarding injecting insulin and checking blood glucose in work place

# Other significant Co-morbidities

- Depression
- Obstructive Sleep Apnea
- Hypogonadism.

# OSA

- Three S
  - Snoring
  - Sleepiness
  - Significant others history of Apnea
- Berlin Questionnaire

# Depression

- Simple Questions
  1. Sleep and rest
  2. Crying Spells
  3. Suicidal thoughts
  4. Attempts
- Questionnaire
  - WHO –ICD Q



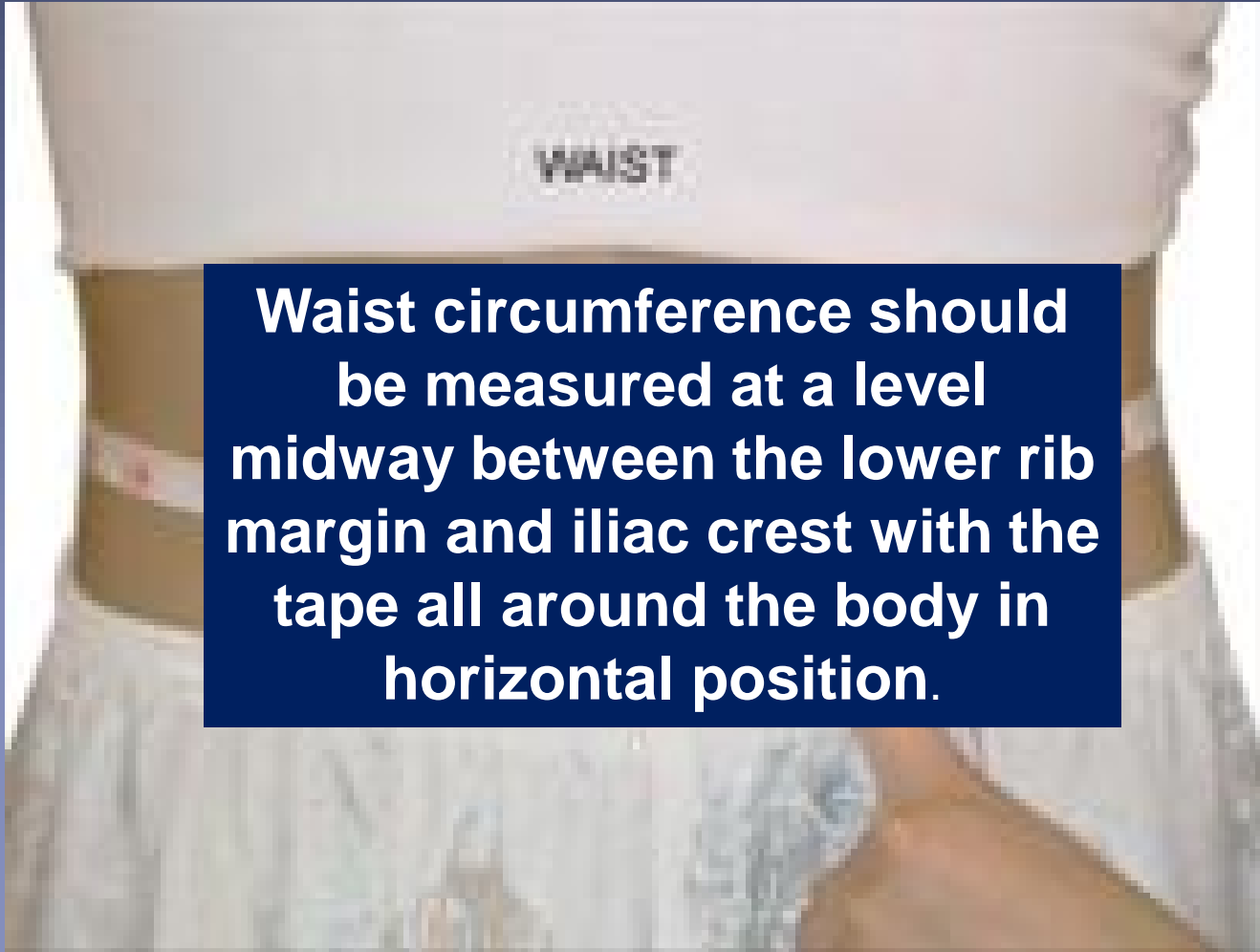
# Summary

- History taking is an important art to be learnt to practise the science of medicine
- Establishing good rapport with the patient is essential
- In a patient with diabetes, history taking aims at getting diagnostic clues as well as guiding in management decisions.

# Physical examination

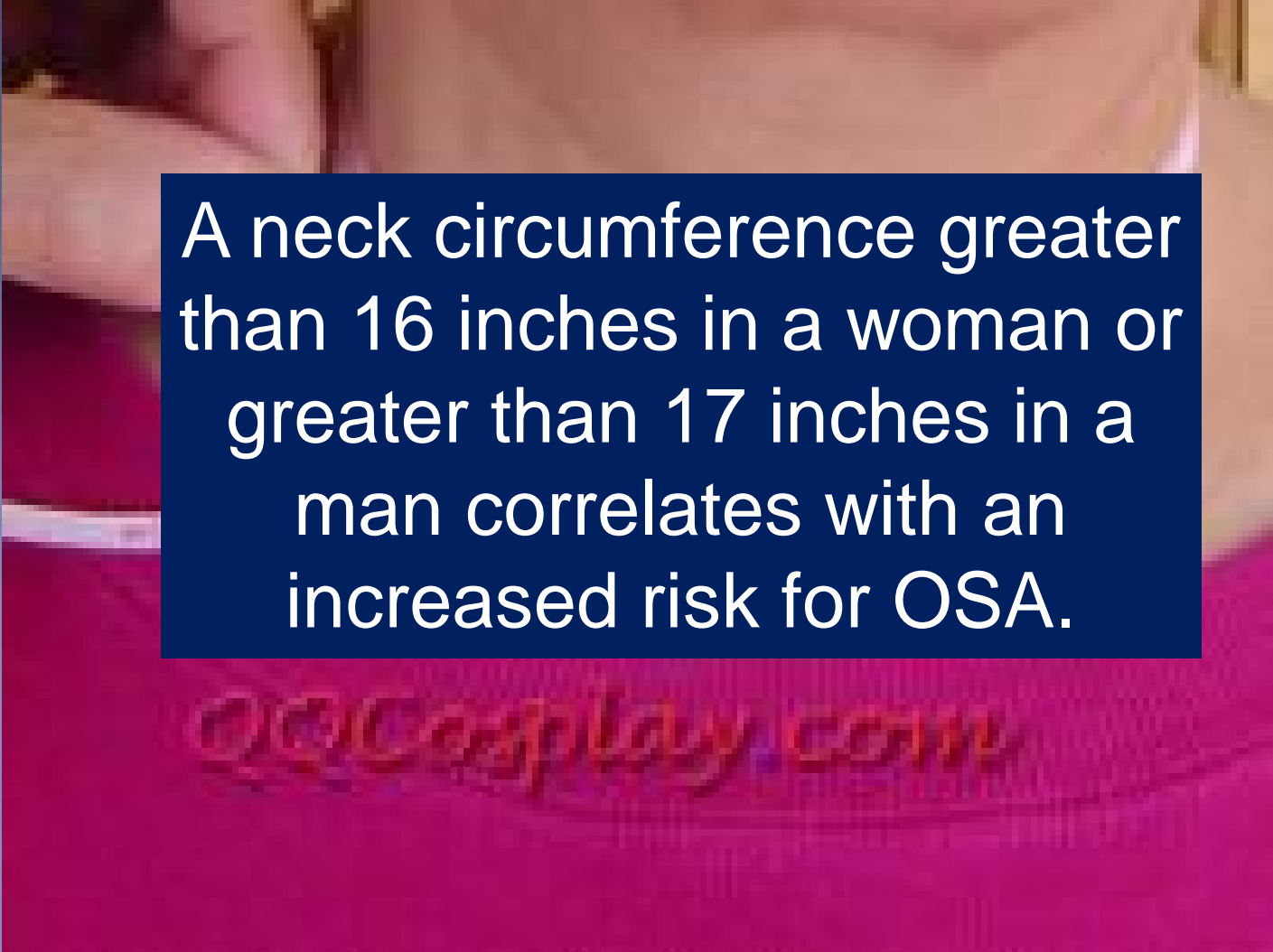
- Anthropometric measurements: Ht, wt, BMI, W:H ratio, **waist circumference, neck circumference**
- General examination- NOT TO OMIT
  - peripheral pulses
  - Postural drop in blood pressure
  - Examination of the foot, footwear
  - Skin and nails
  - Genitalia (erectile dysfunction, balanoposthitis, testicular atrophy in suspect. Hemochromatosis)

# Waist Circumference



**Waist circumference should be measured at a level midway between the lower rib margin and iliac crest with the tape all around the body in horizontal position.**

# Neck Circumference



A neck circumference greater than 16 inches in a woman or greater than 17 inches in a man correlates with an increased risk for OSA.

*@Cosplay.com*

BMI > 25kg/m<sup>2</sup>- overweight, > 30kg/m<sup>2</sup>- obese

Normal waist circumference:

- males < 102 cm
- Females < 88cm

Waist hip ratios:

- males < 0.95 (low risk), > 1 (high risk)
- Females < 0.8 (low risk), > 0.85 (high risk)

# Skin Problems in Diabetes

30% of patients have some skin  
problem

# Acanthosis Nigricans



**Grading of AN**

# Acanthosis at other sites



Dr. Ibrahim Al-Haqail M.D.  
*"Skin Diseases caused by Diabetes"*  
Consultant & Assoc. Professor in Dermatology



# Scleroderma diabetorum



# Vitiligo



# Diabetic Dermopathy





## Cheiroathropathy

# System examination

- CVS – carotid / vertebral arterial bruit
  - ABI if doppler available
- CNS- fundus examination a must
  - cranial nerves-if symptoms
  - all DTRs, primary sensations (large fibre and small fibre), peripheral nerve thick.
  - Cerebellar signs
  - Look for features of vit B12 deficiency, Hansen's, amyloidosis, other causes of neuropathy...

- Abdomen-
  - Hepatosplenomegaly
  - Renal arterial bruit (esp. if uncontrolled HT)
  - Respiratory system-
    - If symptomatic, look for signs of consolidation, sequelae of TB...

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Thanks