



**HISTORY TAKING,
DIAGNOSIS AND TREATMENT PLANNING
FOR COMPLETE DENTURE PATIENTS**

Part - I



*“ When u listen, hear;
When u look, see;
When u touch, feel ”.*

-Allison

INTRODUCTION

- Successful complete denture therapy begins with a thorough assessment of the patients physical & psychological condition & determining a treatment that will deliver a functionally and esthetically acceptable complete denture.

DIAGNOSIS

Dia + gnosis = to differentiate + knowledge

According to GPT 8,

Diagnosis is defined as determination of nature of disease.

It is the examination of the physical state, psychological makeup , & understanding the need of patients to ensure a predictable result.

According to Boucher ,

Planned observation to determine & evaluate the existing conditions,

decision making based on the condition observed.

According to Winkler ,

Examination of physical status,

Evaluation of mental or psychological make up,

Understanding of needs of each patient

To ensure a predictable result.

OBSERVING THE PATIENT

MOTOR SKILLS: Walk, Level of coordination & steadiness.

❖ *Unusual gait*

Parkinson's diseases or severe arthritis.

❖ *Dizziness*

Side effect of medication or cerebrovascular accident.

❖ *Vertigo*

Orthostatic hypotension, overcorrected BP, or cerebral ischemia.

➤ ***Patient with respiratory distress***

Emphysema, asthma, congestive heart problems or heavy smoking.

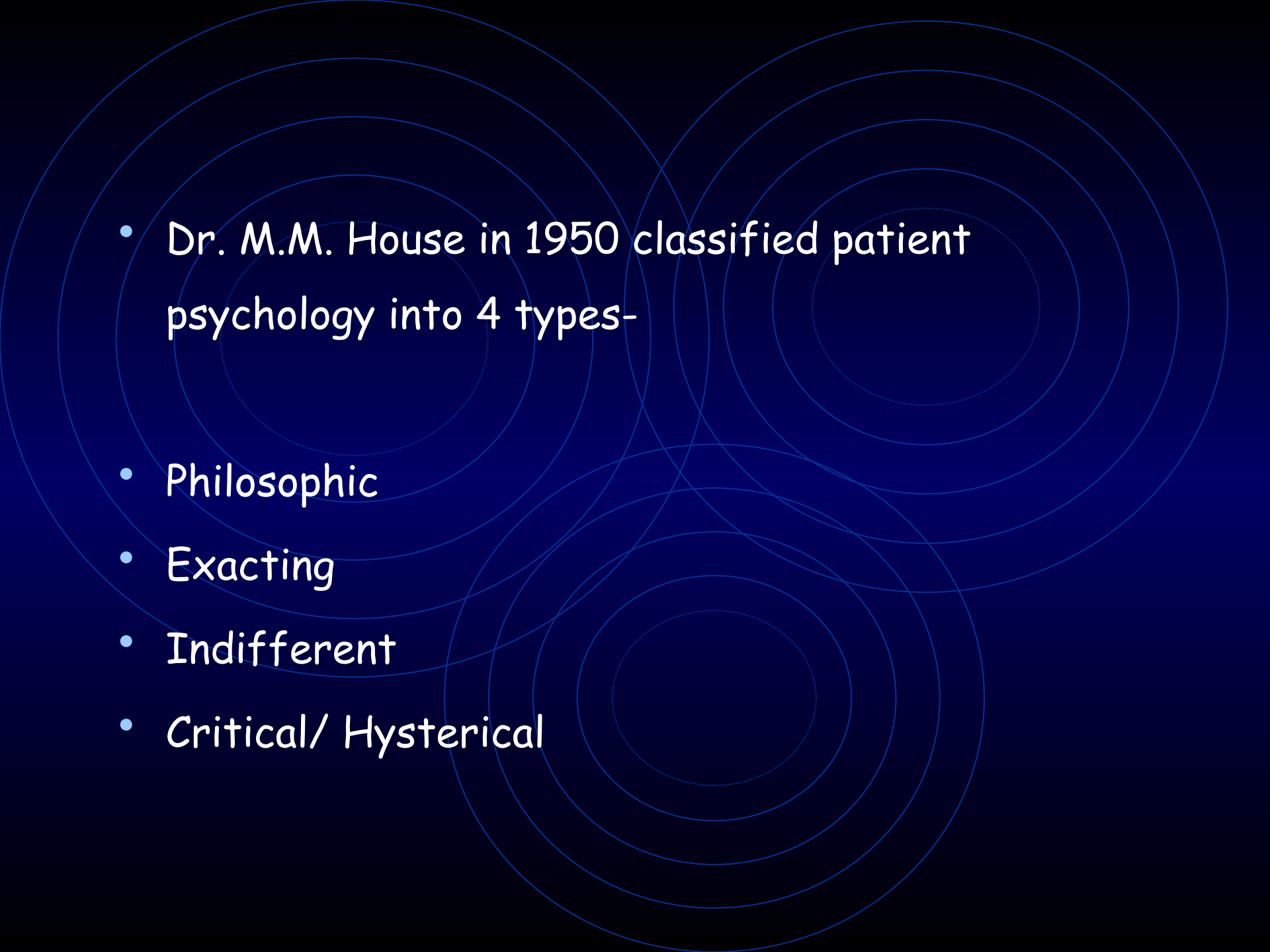
➤ ***Patients under psychotropic drugs***

Uncontrollable chewing movements, licking of lips, uncoordinated tongue movements, tongue tremors, twitching of nose.

These complications may often result into Prosthodontic failures.

De Van stated,
"Meet the mind of the patient before
meeting the mouth of the patient".





- Dr. M.M. House in 1950 classified patient psychology into 4 types-

- Philosophic

- Exacting

- Indifferent

- Critical/ Hysterical

- **Philosophic**- they are easy going, congenial, mentally well adjusted, cooperative & confident of the dentist.
- They have ideal attitude for successful treatment.
- **Exacting**- These patients had bad results with previous treatment & are doubtful that anyone can help them.
- Proper handling & extra time given during & after treatment can make them excellent patients.

- **Indifferent-** they seek treatment because of insistence & have little concern for their oral health.
- They give up easily & require more time to follow instructions regarding use of dentures.
- Little appreciation for the efforts of the dentist.
- **Critical-** These patients find fault with every thing that is done for them & are never happy with their previous dentists.
- A firm control of these patients is essential & the dentist must direct all treatment & decisions.

NAME

- For the purpose of record maintenance and identification.
- Most patients liked to be called by their name, this has a psychological effect as well.



- Learning capabilities, neuromuscular control diminishes with age.
- Tissues lose elasticity and resiliency.
- Reduced ability to withstand stress may restrict some procedures

AGE



GENDER

- Esthetics
- Influence of Sex hormones on the supporting structures.

Women regard appearance above the efficient functioning of the replacement teeth.

Physiologic change in women (menopause),



Productive of many problems which mitigate against easy denture construction

OCCUPATION

People making public appearances,
(artists, actors, salesmen, public speakers, singers, teachers)



Esthetics and Phonetics.

Tradesmen, Mechanics, or Laborers



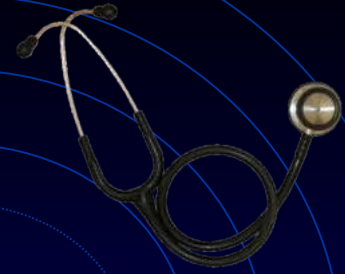
Functional efficiency.

People like beauticians, (open bobby pins with teeth),



Place leverage on the front of the denture and cause problems
in function.

MEDICAL HISTORY



- **Debilitating diseases** - diabetes, osteoarthritis, CVS, CNS disorders & tuberculosis are more common in geriatrics.
- Require specific instructions on denture\ tissue care & special follow-up appointments to observe the response of the soft tissues.

DIABETES MELLITUS

- Impaired carbohydrate metabolism due to insulin deficiency
- Patient suffering from DM will show—

Osteoporosis.

Residual alveolar bone resorption

Delayed wound healing.

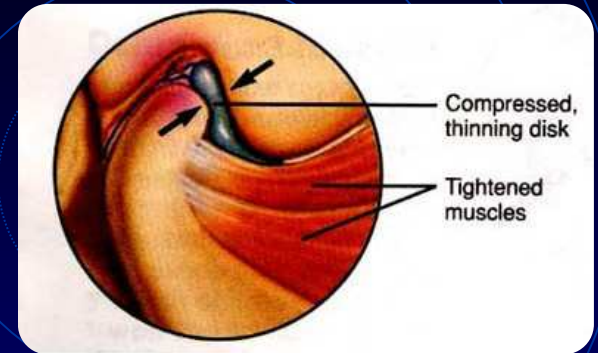
Prone to infection.

- Mucostatic impression technique.
- Avoidance of surgical interventions.



OSTEOARTHRITIS

- Affects elderly above 45 yrs of age
- M:F ratio 2:1
- **Clinical features:-**
 - pain ,crepitation & restricted mandibular movements
 - muscles of mastication become tender.
- Frequent occlusal corrections should be made.
- Difficulty in wearing and cleaning of denture.



INFECTIOUS DISEASES

Bacterial, Viral, Fungal

Tuberculosis

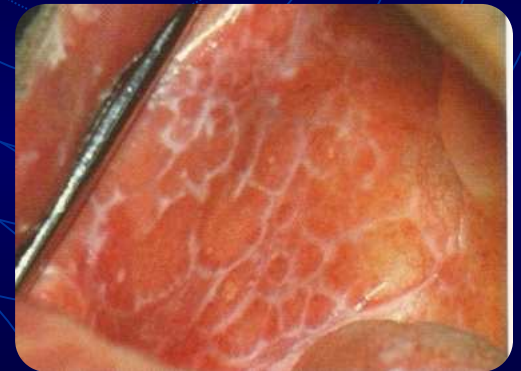
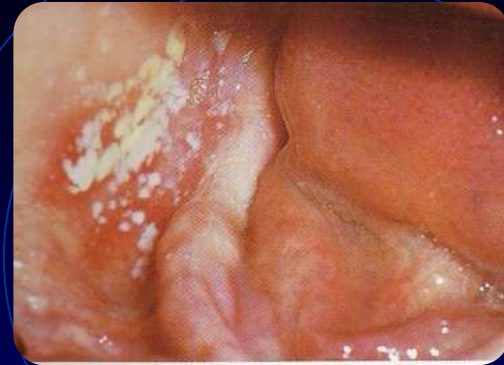
Syphilis

Herpes simplex

Hepatitis A&B

HIV

Candidiasis



Precautions:

Prevent cross contamination

Self precaution & protection

Disposable instruments

Disinfections of impression



CARDIOVASCULAR SYSTEM

- **Angina pectoris:**
 - Avoid anxiety, exertion
 - Physician consultation .
 - Emergency drugs.
- **Myocardial infarction (MI):**
 - Patient with history of MI avoid treatment for 6 months.
 - Physician consultation & reassurance of patient
- **Infective bacterial endocarditis:**
 - Prophylactic Antibiotic therapy prior to surgical procedures.

CENTRAL NERVOUS SYSTEM 11

- **Emotional disturbances**

- **Clinical features:**

- Mild anxiety to anxiety neurosis, depression, phobia, disorientation.
- Severe cases -psychiatric consultation.
- Patient motivation & reassurance.
- In such patients avoid flickering lights and instruments which can cause harm.

PARKINSONISM

- It is a degenerating disease affecting basal ganglia.

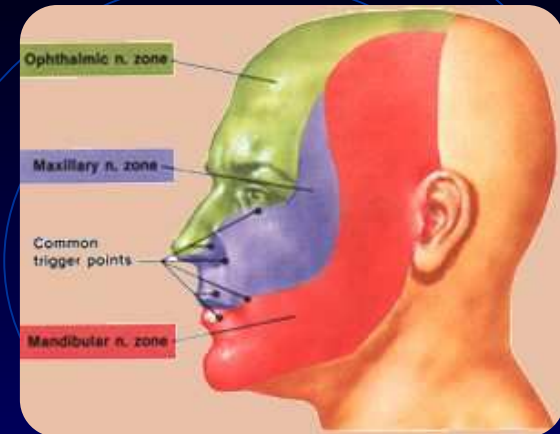
Clinical features:

- expressionless face with staring look
 - soft rapid speech,
 - altered gait, muscle rigidity,
 - tremors in mandible, tongue, fingers, hands.
-
- Patient should be educated about difficulty in eating, speech & retaining mandibular denture.

TRIGEMINAL NEURALGIA

■ Clinical features-

Searing, stabbing, lancinating type of pain initiated on touching trigger zone.



- Patients should be first treated for Trigeminal neuralgia then continued with Prosthodontic treatment

BELL'S PALSY

- **Facial nerve palsy** : cold, trauma, injection of L.A drugs, nerve impingement ,injury of the nerve during surgery.
- Difficulty in making impression, eating & speech.
 - To avoid cheek biting ⇒ over contouring denture base on the affected side
 - Excessive horizontal overlap in posteriors.



DRUG HISTORY



- Antihistaminics, antihypertensive, antiparkinsonic, antidepressants, atropine cause **xerostomia**.
- Cholinesterase, epinephrine, sialogogues cause **Sialorrhea** .
- **Hypoglycemic shock** - Insulin.
- **Behavioral changes & confusion** - antidepressants, corticosteroids, antiparkinsonism, antihistaminic.

- **RADIATION THERAPY**

Patients undergoing radiation therapy should have a waiting period before complete denture construction.

They should be examined frequently for radionecrosis.



- **CLIMACTERIC CONDITIONS**

Like menopause can cause glandular changes, osteoporosis & psychiatric changes which can affect the efficiency of the denture.

DENTAL HISTORY

Chief complaint-

- ❖ Helps to assess whether the patient's expectations are realistic or unrealistic & psychological classification.

Reveals information about:

1. Previous dental experiences
2. Patient's concern to his oral health
3. Patient's education and motivation level



Reason for loss of Teeth

Period of Edentulousness

Pretreatment Records

Previous Dentures

CURRENT / EXISTING DENTURES

- ❑ Retention & stability .
- ❑ Jaw relation.
- ❑ Patient comfort .
- ❑ Denture wear or breakage -
may indicate bruxism.
- ❑ Period for which the patient has been wearing the
denture & the amount of resorption associated with it.





**HISTORY TAKING,
DIAGNOSIS AND TREATMENT PLANNING
FOR COMPLETE DENTURE PATIENTS**

Part -ii



Extra-oral Examination

TMJ Examination

✓ Examined for range of movements, pain, muscles of mastication, joint sounds upon opening & closing.

1. Rapid jaw movement on command

2. Digital perception of tmj sounds



TEMPOROMANDIBULAR DISORDERS

- Pain on opening/ closing movements of mandible.
- Clicking sound, crepitations
- Deviation of mandible on opening
- Muscle tenderness
- Limitation of mandibular movement

The centric relation depends upon structural & functional harmony of osseous structures ,the intra articular tissues capsular ligaments.

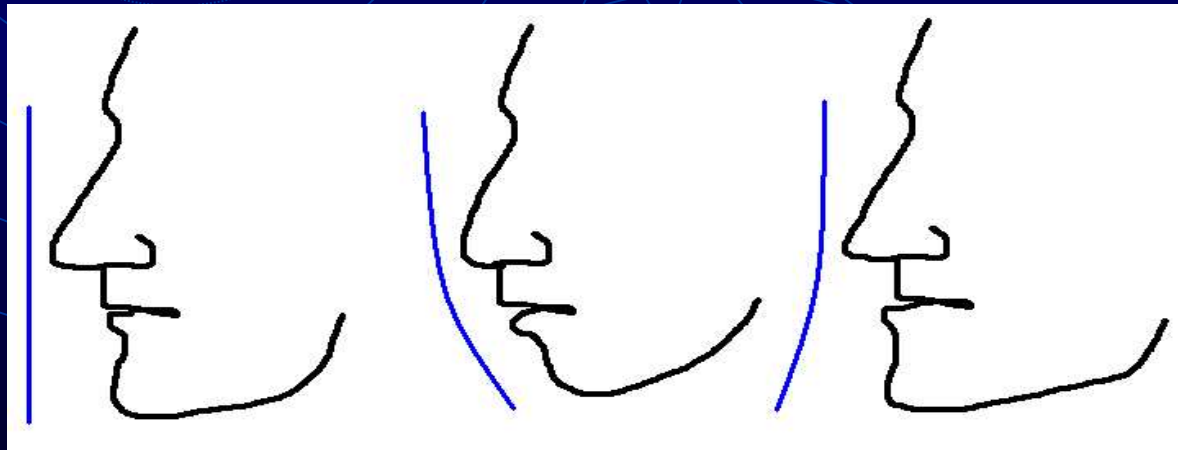
RECOMMENDED MANAGEMENT STRATEGIES

- Symptomatic treatment with medicines
- Control or reduction of contributory factors
- Treatment of pathologic sequelae
- Patient's counselling

TMJ problem may have to be treated by alteration of existing prosthesis, recovering lost occlusal VD, exercise, rest or drug therapy.

PROFILE

Profile view will indicate the relation of the maxilla to the mandible.



CLASS I

CLASS II

CLASS III

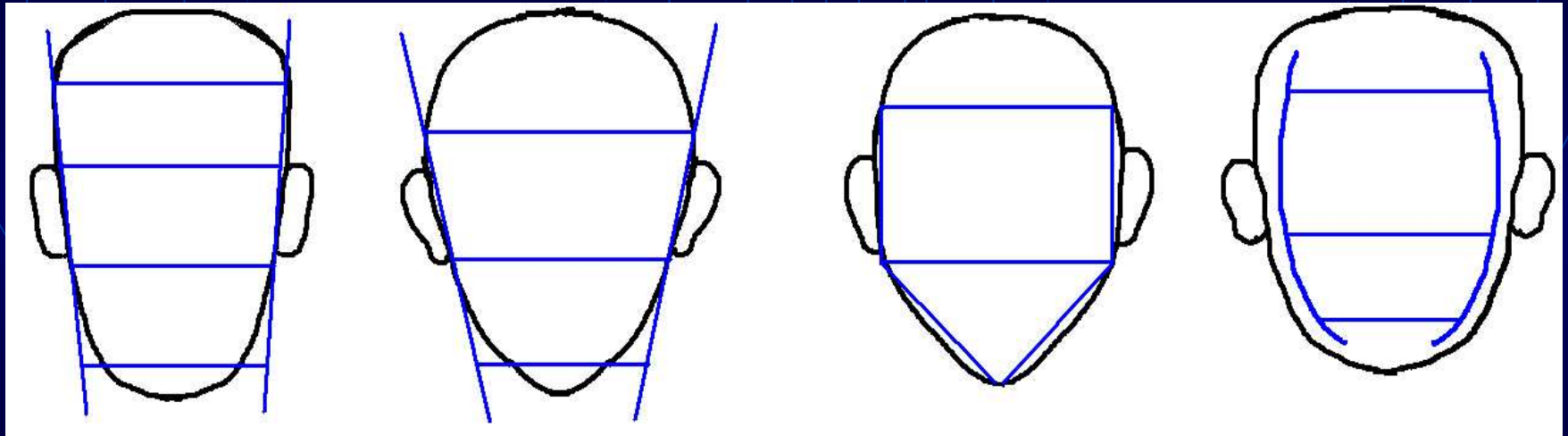
FACIAL SYMMETRY

- Symmetrical
- Asymmetrical
(swellings, hemi facial hypertrophy/atrophy, congenital, unilateral ankylosis, etc)



SHAPE OF FACE

Classification by LEON WILLIAM



SQUARE

TAPERED

SQUARE TAPERING

OVOID

TONE OF FACIAL TISSUES

It depends on the age & health of the patient

According to House-

- ❑ **Class I**—Normal tone & placement of facial muscles of mastication & expression.
- ❑ **Class II**--Displays normal function but slightly decreased tone.
- ❑ **Class III**--Decreased muscle tone function

COMPLEXION

- ❑ **Skin of face**--Dark,Medium,Fair
- ❑ **Hair color**-- Black, brown, blond.
- ❑ **Eyes**-- Blue ,gray, brown, Black.

The color of the skin guides in shade selection of the teeth .

LIPS

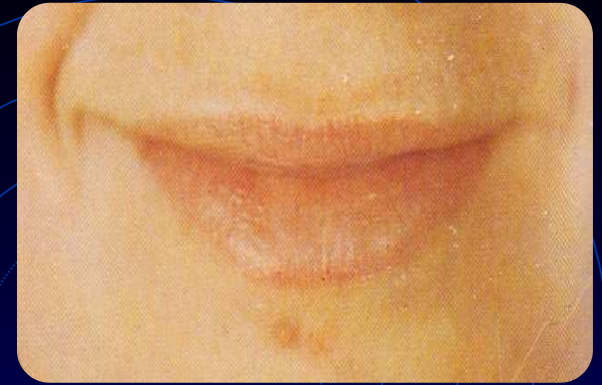
1. Support
2. Thickness
3. Length
4. Fullness



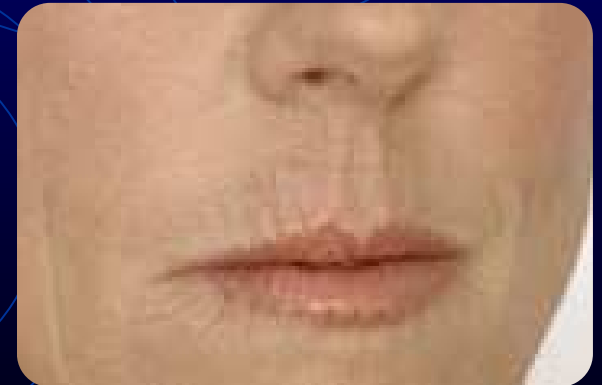
- **Lip support-** classified as;

Adequately supported

Unsupported



- If the tissues around the mouth has wrinkles & the rest of the face does not, significant improvement can be expected.



- If wrinkles are long standing then they may not disappear at once.

LIP THICKNESS

- **Thick lips** need less support from the artificial teeth .
- **Thin lips** rely on labiolingual position of the tooth for their fullness & support.



LIP LENGTH

Normal or medium

Long (reveals very little of anterior teeth)

Short (allows the display of denture base)

HEALTH OF LIPS - fissures, cracks or ulcers

indicate vit B deficiency, candidiasis or prolong over closure of mouth due to decrease VD.



NEUROMUSCULAR CO-ORDINATION

Excellent

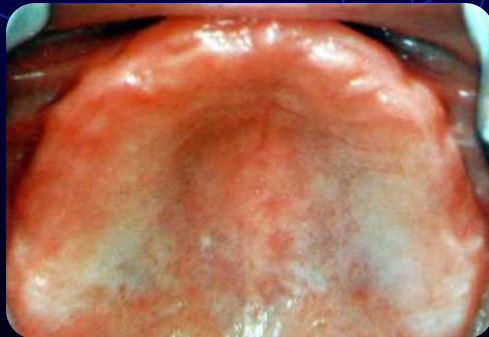
Poor

Fair

- Poor neuromuscular co-ordination affects impression recording & jaw relation recording.
- Advise for tongue & mouth exercises.

INTRAOURAL EXAMINATION

- Color of mucosa- **healthy pink**
- **Redness** indicates inflammatory changes due to ill fitting dentures, smoking, infection or systemic diseases.
- **White patches** may indicate an area of frictional keratosis

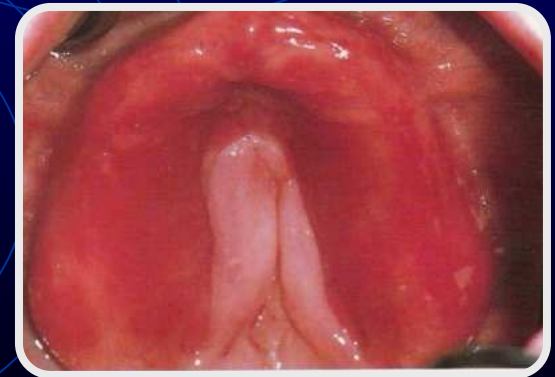
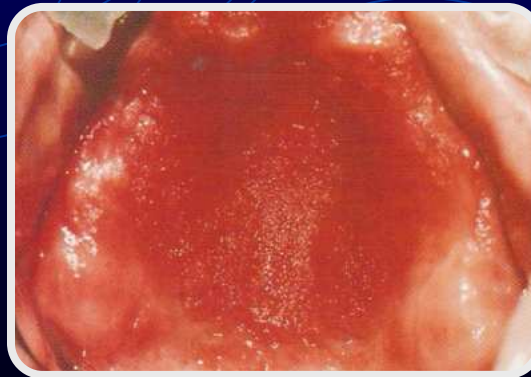


CONDITION OF MUCOSA

class 1 : healthy mucosa

class 2 : irritated mucosa

class 3 : pathologic mucosa



SALIVA

Major salivary glands should be examined for patency

- Saliva can be classified as-
 - class 1** : normal quality & quantity of saliva. Cohesive & adhesive properties are ideal.
 - class 2** : excessive saliva. Contains much mucus.
 - class 3** : xerostomia.

Excessive saliva
complicate
impression
making

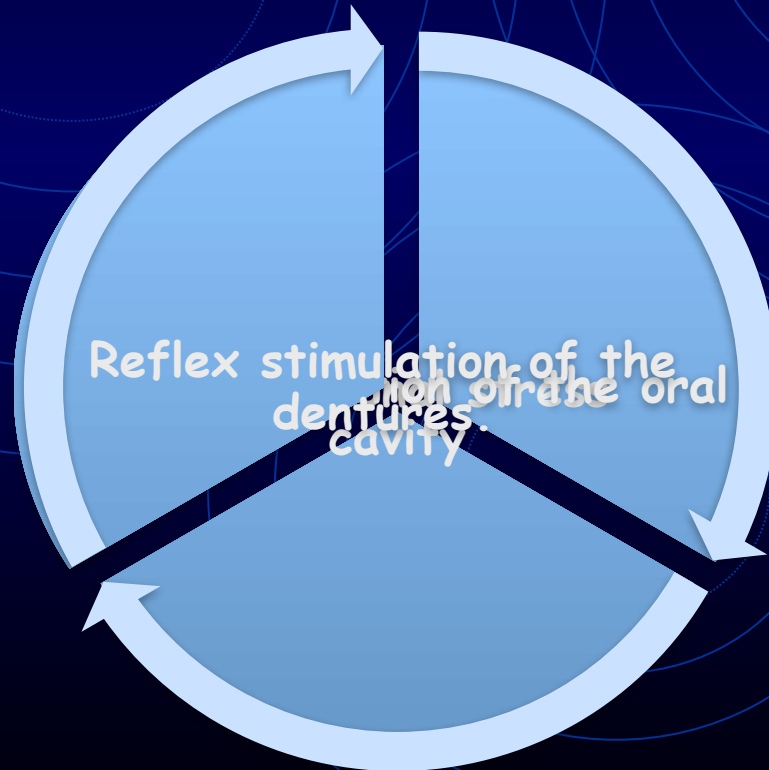
Lack of saliva
hampers
retention,
mucosal
irritation

Thick ropy
saliva
dislodgement of
denture due to
hydraulic
pressure

Copious amount
adds to gagging

SIALORRHEA

- Increased flow of blood through the salivary glands and their excessive stimulation.
- Sialorrhea in denture wearers is due to-



• **Causes:**

- Incorrect centric jaw relation registration
- Excessive vertical dimensions
- Overextension & excessive thickness of denture borders
- Excessive pressure on oral mucosa

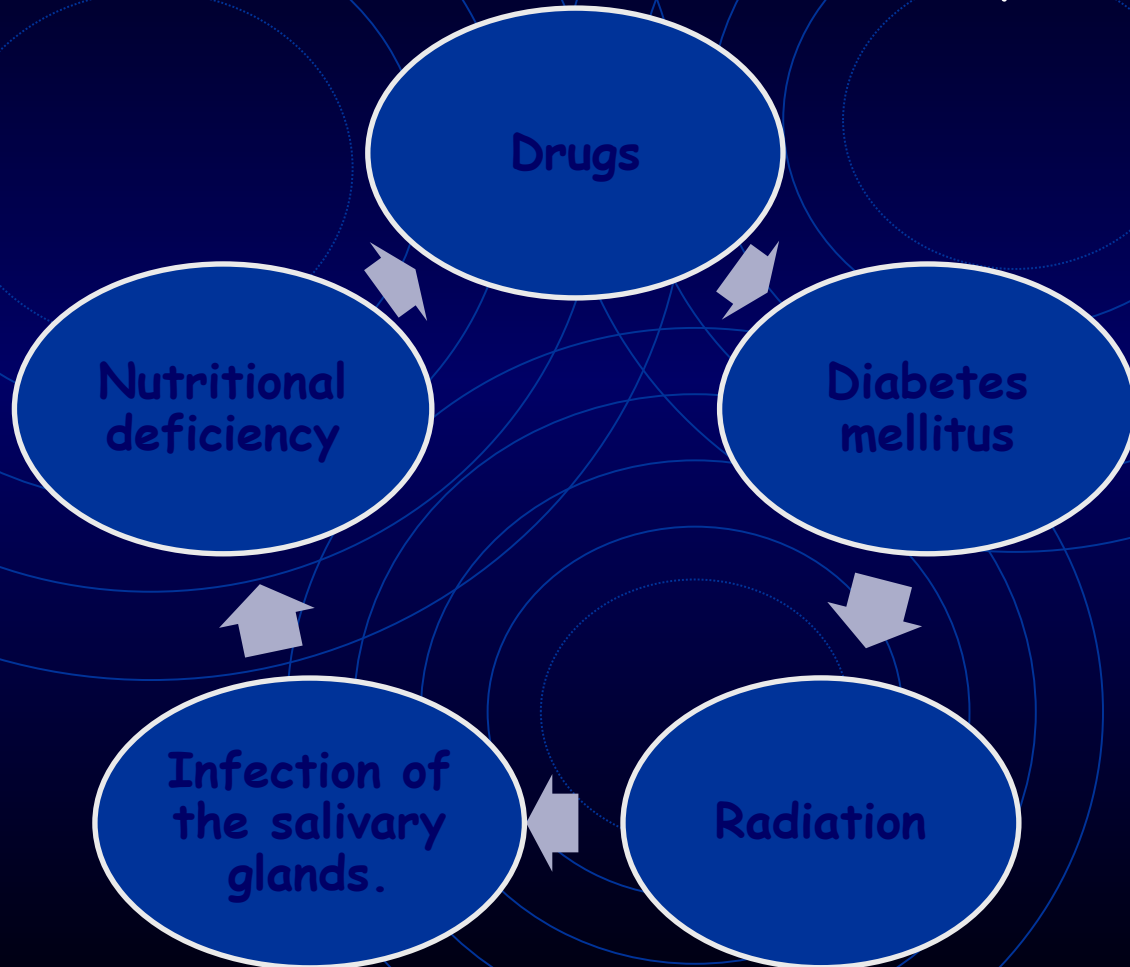
• **Management**

- Correction of the dentures
- Reassurance / psychotherapy of the patient
- Atropine sulfate administration orally

XEROSTOMIA

Symptom associated with alterations of salivary function.

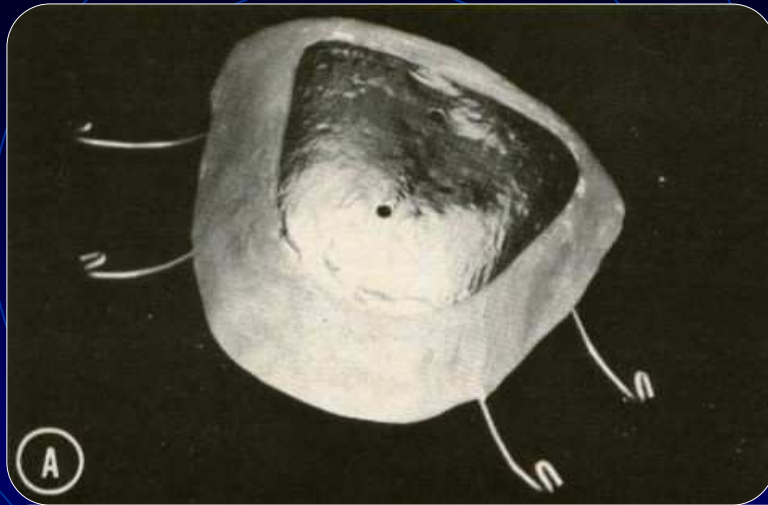
Causes



Management

- ✓ Denture use limited to short periods.
- ✓ Nutritious diet/soft and moist food.
- ✓ Chewing sugarless gums and frequent liquid intake.
- ✓ Good denture hygiene maintenance.
- ✓ Fluoride application
- ✓ Pilocarpine therapy.
- ✓ Salivary substitutes.

ARTIFICIAL SALIVA RESERVOIRS



RESIDUAL ALVEOLAR RIDGE

ARCH SIZE

class 1 : large [ideal retention & stability]

class 2 : medium [good retention& stability]

class 3 : small [difficult to achieve good retention & stability]



large



medium



small

ARCH FORM

Plays a role in support of denture & tooth selection.

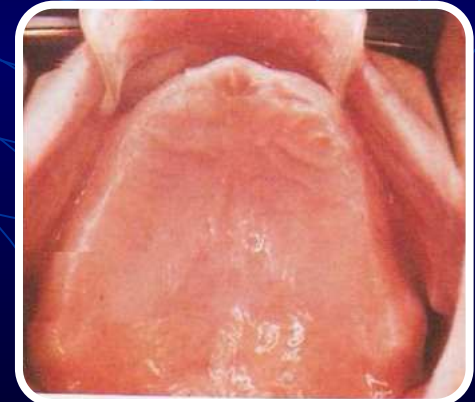
House classified as-



Square arch form



Tapering arch form

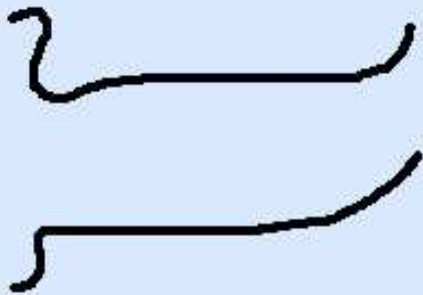


Oval arch form

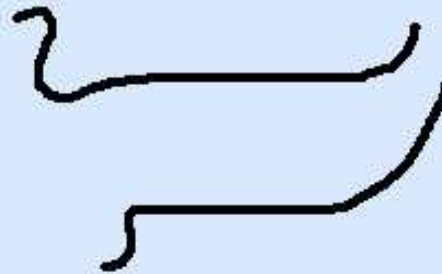
RIDGE RELATION

Positional relation of the mandibular ridge to the maxillary ridge.

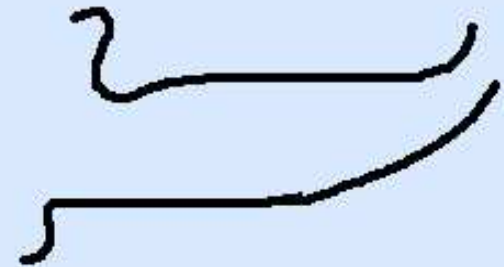
Classified as-



Normal



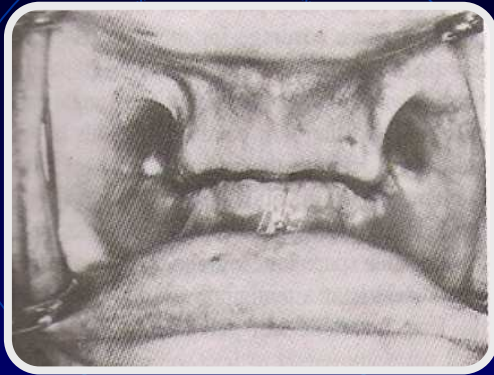
Retrognathic



Prognathic

INTER-ARCH SPACE

Normally 16-20mm adequate for accommodating teeth.



- ↑ Inter-arch space - ↓ retention & stability of denture.
- ↓ Inter-arch space makes teeth arrangement difficult, however stability of denture ↑

HARD PALATE

V shaped: retention is less. Peripheral seal easily broken.

Flat: reduced resistance to lateral & rotatory forces.

U shaped: ideal for retention



U-SHAPED



V-SHAPED



FLAT

GAG REFLEX

❑ Normal defense mechanism designed to prevent foreign bodies from entering the trachea.

❑ **Causes:**

Systemic disorders

Psychologic factors

Physiologic factors

Iatrogenic factors.



Poses problems during making of impression.

Denture insertion may also be difficult



Usually careful handling of impression procedures & constant reassurance will suffice.

The orofacial
musculature,
external surfaces:
retention and
stability

Teeth :
positioned in the
neutral zone

TONGUE

The polished
surface: properly
shaped so normal
musculature will
retain the denture.

Base of tongue:
emergency retentive
force for some
patients

TONGUE SIZE

- ❑ **Large tongue:** patient edentulous for a long time have enlarged & powerful tongue (*proptosis lingualis*) contributing to denture instability & hindrance to impression making.
- ❑ **Small tongue:** facilitates impression making but does not provide adequate peripheral seal.



TONGUE MOVEMENT & MUSCULAR COORDINATION

To register a good peripheral
training

Maintaining the denture in the
mouth during functional activities

To record centric relation

TONGUE POSITION

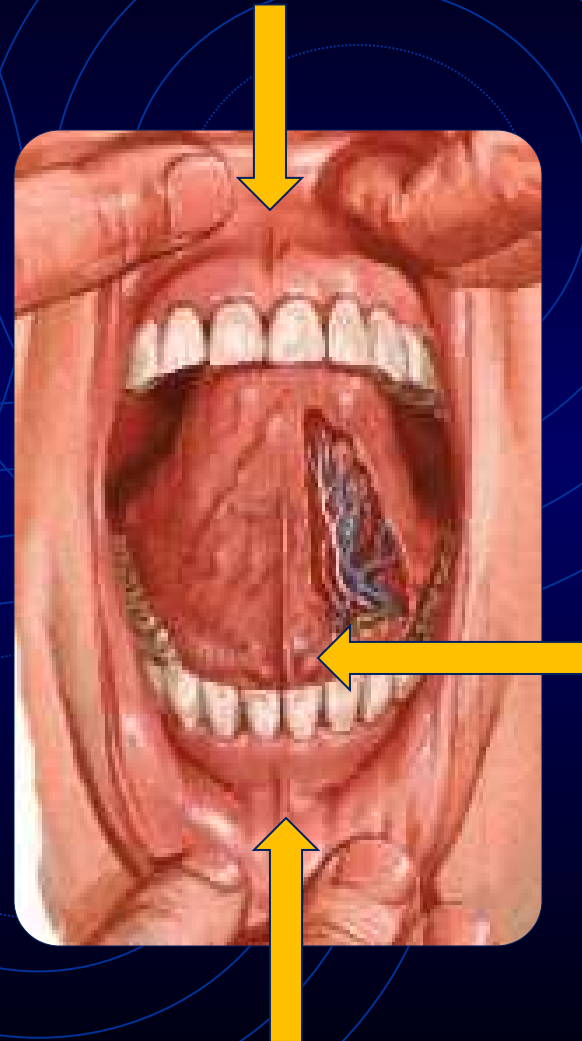
- ❑ Important for the prognosis of mandibular dentures.
- ❑ It guides in evaluating the occlusal height.
- ❑ Dorsal surface of tongue is nearly in level with occlusal surface of posterior teeth.
- ❑ At rest tip gently touches the lingual surface of lower anterior teeth.

SOFT TISSUE EXAMINATION FRENUM

- ❖ According to **House**
- ❖ In maxilla as
 - a. High
 - b. Medium
 - c. Low.

In mandible as

- a. Low
- b. Medium
- c. High.



MUSCLE ATTACHMENT

Interfere with denture extension & border seal.

House classified border attachments as-

Class I At least 0.5 inches distance between attachment & ridge crest's

Class II Distance between attachment & ridge crest 0.25 to 0.5 inches.

Class III Below 0.25 inches



SOFT PALATE

Amount of tissue that accept PPS.

➤ Class I

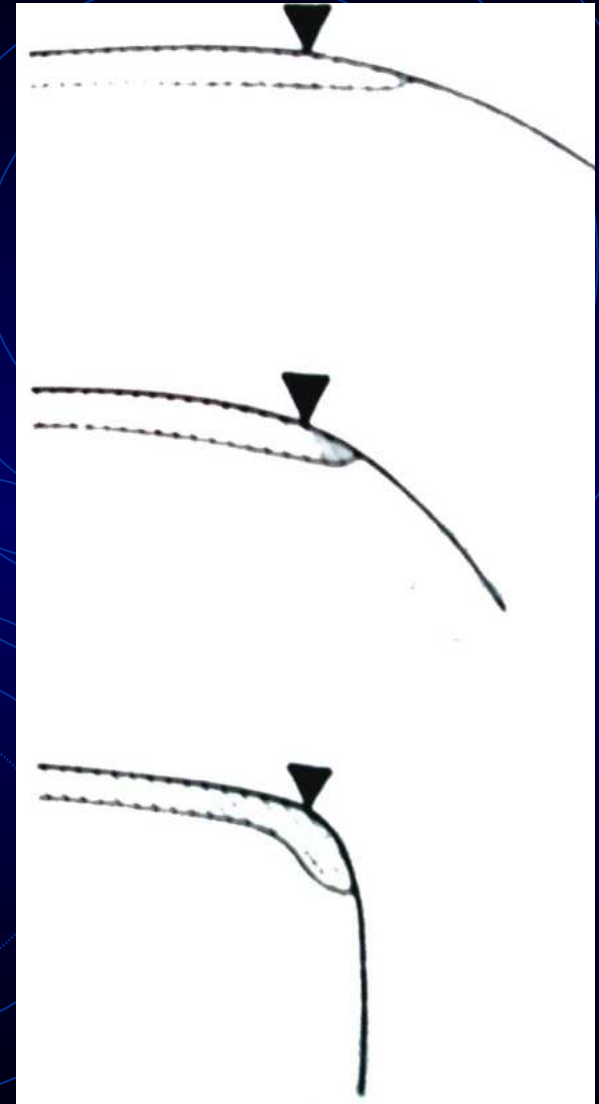
-Ideal for retention.

➤ Class II

-Good retention is possible.

➤ Class III

-Poor retention



CONCLUSION

"**Treatment plan** is not scientific truth, but wisdom, the plan that a prudent clinician would develop to maximize benefit to the patient from the treatment procedures compared to both cost and risk.
And **Diagnosis** is the source of that wisdom."

The background of the slide is a dark blue color. It features several sets of concentric circles in a lighter blue shade. These circles are arranged in a way that they overlap each other, creating a complex, layered pattern. The circles are centered around the text, with some sets being larger and more prominent than others.

Spend more time in planning than doing,
So that doing becomes easy.

-P.K. Thomas

Thank You!

