Ayurvedic practical Physiology

क्रियाशारीर प्रायोगिक

Term - III

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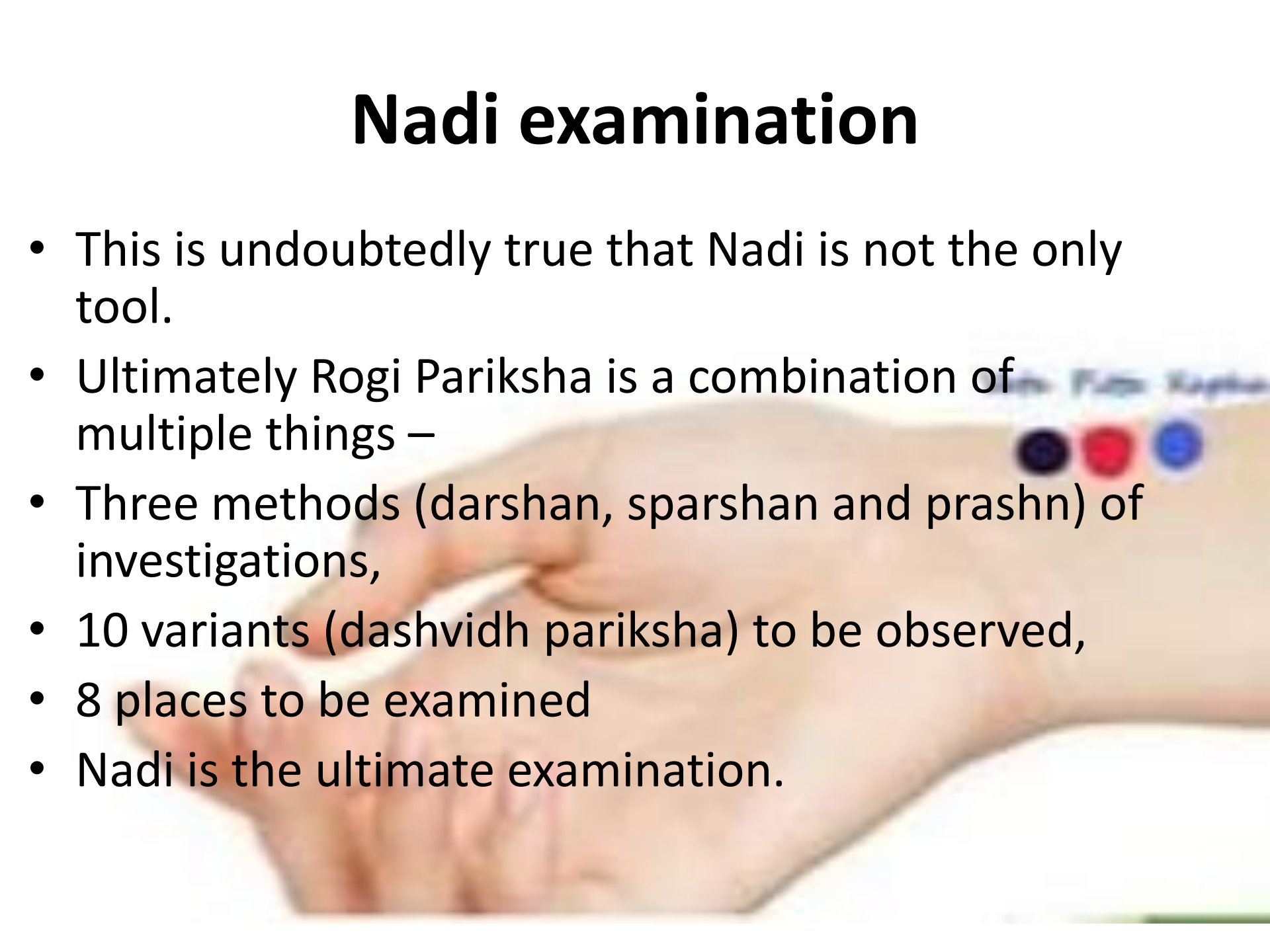
Nadi examination

- This is undoubtedly true that Nadi is not the only tool.
- Ultimately Rogi Pariksha is a combination of multiple things –
- Three methods (darshan, sparshan and prashn) of investigations,
- 10 variants (dashvidh pariksha) to be observed,
- 8 places to be examined
- Nadi is the ultimate examination.



References in Charak

- Probably you need to re read the Charak samhita with perspective of Nadi Pariksha.
- Acharya Charak has specifically used the word Sparsh Vigyan.
- References

Ch. Su.30,

Ch. In. 3,

Ch. Vi. 5

Ch. Si. 9

Describe the **procedure** of *Nadi Parikshana*

- *Cognitive Mk Kh Lecture Demonstration*
- Discussion
- Observation Tutorial
- Practical
- Viva voce
- F & S
- II

1. Preparation of the Patient

- The patient should be in a calm and relaxed state .
- Best time: early morning on an empty stomach , in a quiet environment.
- Patient should sit comfortably with the left hand relaxed and palm facing upward.
- Avoid examination immediately after meals, exercise, or emotional stress.

2. Position of the Examiner

- The physician (Vaidya) should sit facing the patient.
- The examiner uses the right hand fingers (index, middle, and ring fingers) to palpate the pulse.

3. Location of Pulse

- Pulse is usually examined at the radial artery on the wrist, just below the thumb root.
- Sometimes, pulses at carotid, femoral, or other arteries may also be checked for specific conditions.

4. Finger Placement

- Index Finger (Tarjani) → for Vata dosha.
- Middle Finger (Madhyama) → for Pitta dosha.
- Ring Finger (Anamika) → for Kapha dosha.
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- The three fingers are placed gently side by side on the artery to feel different qualities of the pulse.

5. Observation Parameters

- The physician observes:
- Rate : fast, slow, irregular.
- Rhythm : regular or irregular.
- Volume & Tension : strong, weak, hard, soft.
- Movement (Gati) : compared with animals for dosha identification:
- **Vata** pulse → feels like a serpent (**Sarpa/ Jaloka** Gati) : irregular, variable, unsteady.
- **Pitta** pulse → feels like a frog (**Manduka/ Kak** Gati) : jumping, forceful, warm.
- **Kapha** pulse → feels like a swan (**Hamsa/paravat** Gati) : slow, steady, heavy, smooth.

6. Interpretation

- Single Dosha dominance → pulse corresponds mainly to that dosha.
- Dual Dosha involvement → mixed characteristics appear.
- Tri-doshic imbalance → very difficult pulse, often seen in critical illness.

7. Time of Examination

- Traditionally, each dosha is more dominant at different times:
- Day
  - Morning → Kapha
  - Noon → Pitta
  - Evening → Vata
- Night
  - Early night → Kapha
  - Mid Night → Pitta
  - Late Night → Vata
- This is also considered while interpreting the pulse.

Demonstrate *Nadi Parikshana under the supervision of the* ***teacher****.*

- CO 5 *Psychomotor Mk Sh Demonstration*
- Bed side clinic
- Discussion
- Assist Viva voce F & S II

Find out recent advances in Nadi pariksha

- CO 5 Cognitive Mk Kh Lecture Demonstration
- Discussion
- Observe Practical
- Viva voce OSPE F & S II

Photoplethysmography (PPG)

- Measures: Blood volume changes using light sensors.
- Uses: HR, SpO_2, stress, sleep analysis.
- Pros: Non-invasive, portable, cost-effective.
- Cons: Motion artifacts, light interference.

Pressure Plethysmography

- Measures: Arterial pressure changes.
- Uses: BP variability, vascular health.
- Pros: Accurate hemodynamic data.
- Cons: Operator-dependent.

Auditory Plethysmography

- Measures: Blood flow sounds.
- Uses: Detects vascular anomalies.
- Pros: Simple, qualitative.
- Cons: Limited quantitative data.

Heart Rate Variability (HRV)

- Measures: Variation between heartbeats → ANS balance.
- Parameters:
- Time-Domain: SDNN, RMSSD
- Frequency-Domain: LF, HF, LF/HF ratio
- Uses: Stress, chronic disease monitoring, mental health, fitness.
- Pros: Deep insights into ANS regulation.
- Cons: Influenced by age, drugs, circadian rhythm.

Pulse Wave Velocity (PWV)

- Measures: Speed of pulse wave → arterial stiffness.
- Types: Carotid-Femoral (aortic), Brachial-Ankle (peripheral).
- Uses: Cardiovascular risk, hypertension, atherosclerosis detection.
- Pros: Gold standard for arterial health.
- Cons: Needs specialized equipment, proper sensor placement.

Future Perspectives

- AI-driven analytics for better interpretation.
- Wearables for continuous monitoring.
- Integration with Ayurveda → bridging tradition & modern science.
- Portable PWV devices for rural/remote use.

THANKS

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