



# BACK TO BASICS

Putting your Assessment to Work  
Clinical Syndromes and Recognition

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# QUICK REVIEW

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# WHERE WE HAVE BEEN

- Avoiding thinking errors:
  - Do the same thing the same way every time
  - Leverage your observations: Primary Survery (type 1 thinking)
  - Test it against your history and exam (is type 2 thinking needed?)



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# HISTORY

What is going on + why might it be happening

Structured curiosity

OPQRST, AMPLE, ROS

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BLOOD  
PRESSURE



HEART RATE



RESPIRATORY  
RATE



O2 SAT



TEMP

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**VITALS:**

# THE EXAM: CHECK OUT WHAT THE PATIENT SAID...

- You have several things that could be going on (differential diagnosis)
- Now see what you find
- The more you evaluate and find normal, the more you recognize abnormal

Look

Listen

Palpate

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WITH THIS  
STRUCTURE, WE  
CAN "SOLVE" A  
LOT OF  
RIDDLES...



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# CLINICAL SYNDROMES

Groups of symptoms that occur together and are recognized as a distinct medical condition. What we are hunting for to drive our management.

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# CASES

Dispatch: 65 yo female  
with stroke-like  
symptoms

Dispatch: 37 yo male  
dizzy

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# DISPATCH: 65 YO FEMALE WITH STROKE-LIKE SYMPTOMS

- Driving to the call: what could be going on (first differential dx)
    - Stroke
    - Diabetic emergency
    - Old stroke, new...
    - Trauma
  - Type 1 or type 2 thinking?
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## 65 YO FEMALE WITH STROKE- LIKE SYMPTOMS

- No noted respiratory distress
- As you see her
- Bright light on her head to let you know it's a brain problem

You have decided this is most likely stroke

- What questions on history help confirm this diagnosis?

What do you go looking for that fits the “stroke” clinical syndrome

- Acute onset (clear start)
- Findings are new
- One sided symptoms
- ROS: No other things going on (falls, infection, chest pain)
- AMPLE: +/- risk factors such as HTN, DM, atrial fibrillation

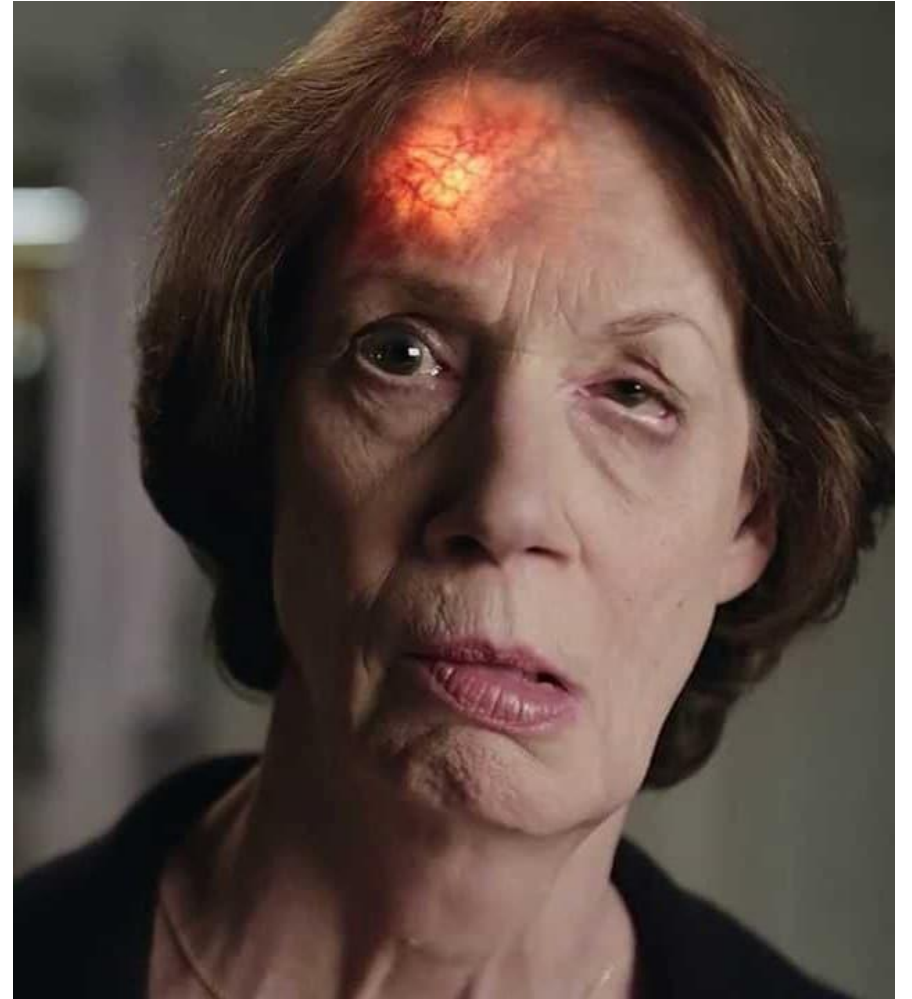
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# HISTORY

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# EXAM

- Vitals: 160/90 72 18 95% RA
- What do you do on your exam?
  - This is what you can see
  - What else do you check?
  - What on exam would make you consider this isn't a stroke?
- Tools: Glucose, +/- EKG



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# NEURO EXAM COMPONENTS-

## YOU JUST HAVE TO IDENTIFY ABNORMAL

Cranial nerves

Motor strength

Sensation

Coordination/balance



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## CRANIAL NERVES- FANCY WAY TO ASK IF ALL THE FACE MOVES NORMALLY

- Raise your eyebrows
  - Follow my finger with your eyes in all directions + can you see it move everywhere
  - Puff your cheeks
  - Open your mouth and stick out your tongue
  - Can you feel me touch your face on each side?
  
  - Ask yourself- does it look the same and move like you expect?
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## MOTOR STRENGTH- CAN YOU RAISE EACH EXTREMITY AND HOLD IT THERE?

- Consider other reasons why they might not
- Pain?
- Prior CVA?
- Other underlying condition
- Can you usually do this? Are they bedbound?

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# SENSATION- CAN THEY FEEL YOU TOUCH EACH EXTREMITY

- Have them look away from where you are testing
- Do they have baseline neuropathy (think diabetes)



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# COORDINATION- THIS IS A POSTERIOR BRAIN THING!

Most subtle and Most forgotten

Sit up without assistance

Able to ambulate with normal  
balance?

Other signs of poor coordination?

- Finger to nose test
- Rapid alternating movements

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**BUT MY  
PATIENT  
DOESN'T  
FOLLOW  
COMMANDS**

Think about why

Understanding problem

Level of consciousness problem

Language/hearing problem

- Is there something else that makes you think stroke?
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# THIS CASE FEELS LIKE TYPE 1 THINKING



- Leading differential diagnosis from dispatch
  - Primary assessment/survey reinforces
  - Used our history and exam to consider things that would change our minds
  - Why do the whole thing if you know early on that the diagnosis is stroke?
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When we are unsure, we are less likely to act

This is sometimes a really good thing



Confidence and competence are built together

Jumping on a moving treadmill



Being good at assessment can build your confidence

More likely to act  
Less worried/anxious when you do  
Makes you better at your history and exam

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# CONFIDENCE AND COMPETENCE

# DISPATCH: 37 YO MALE DIZZY

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- Driving to the call: what could be going on (first differential dx)
  - Cardiac
  - Anxiety
  - Neuro
  - Tox
  - Dehydration
  - Trauma
  - Infection
  - Others



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# PRIMARY SURVEY

- Awake, uncomfortable appearing
  - Speaking in full sentences
  - No respiratory distress
  - No red light/lightning etc to ID the problem
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# HISTORY: STRUCTURED CURIOSITY

- O: Was doing work around the house and this feeling came on all of a sudden
  - P: Its been constant and hasn't changed, opening his eyes makes it worse
  - Q/R: Feels like the room is spinning, doesn't want to walk or move, feels unbalanced
  - S: its bad
  - T: started about 1300
  - Are there other questions any of these answers prompt you to ask?
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**(S)AMPLE**

No allergies

Hypertension

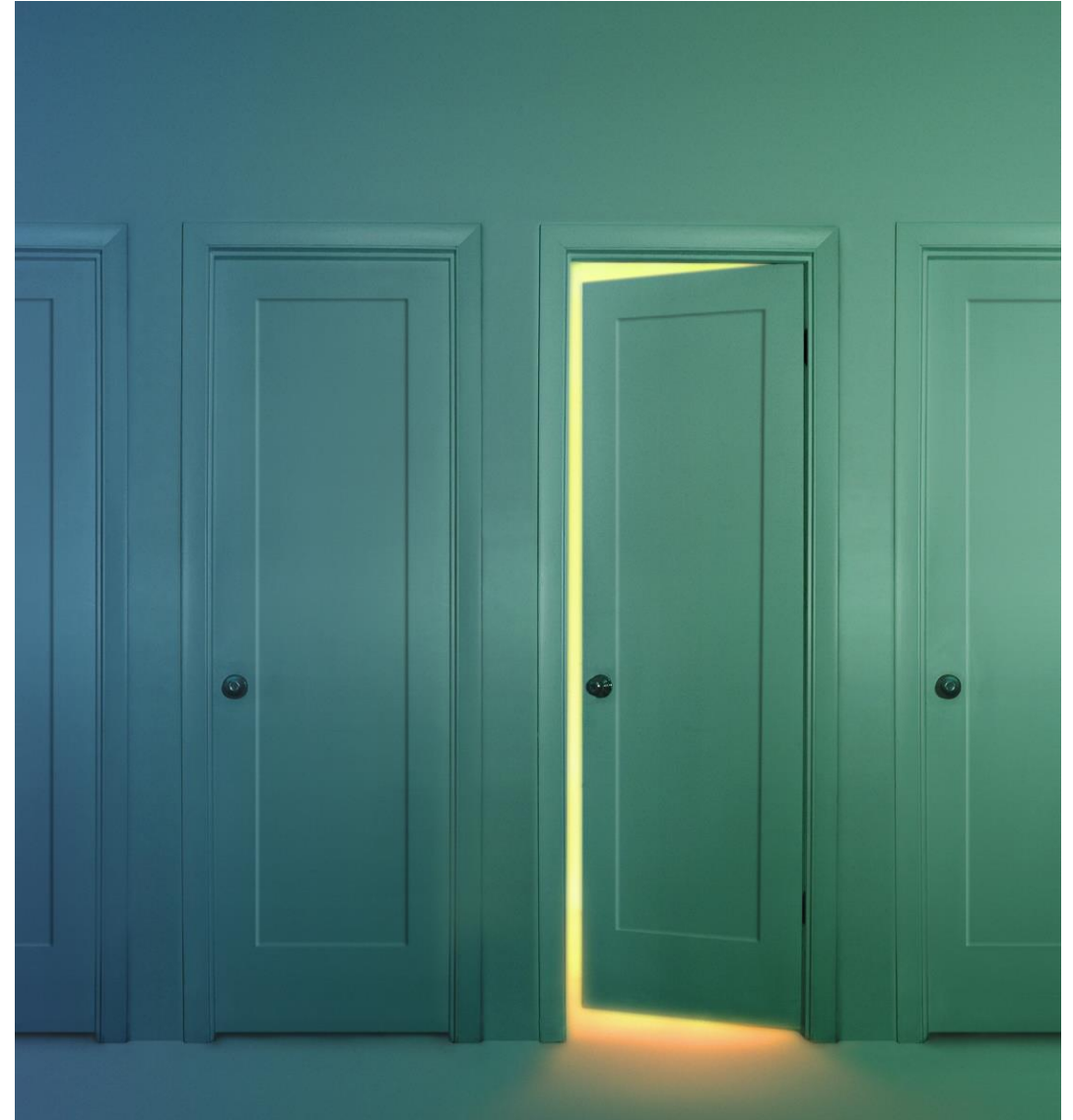
Lisinopril

Ate lunch

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# ROS

- Specific things? (think about your differential diagnosis)
  - No trauma or falls
  - No recent infections
  - Head to toe
    - Mild headache
    - Can't focus well
    - Nauseated (no vomiting or other GI)
    - Has been eating and drinking okay
    - No pain anywhere else
    - Feels like it's hard to walk (off balance)
    - Other questions?



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# MODIFIED DIFFERENTIAL DIAGNOSIS FROM HISTORY?

- Cardiac
- Anxiety
- Neuro
- Tox
- Dehydration
- Trauma
- Infection

Worried? Not worried? Not sure?

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# EXAM: DETECTIVE WORK

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Vitals 160/90 90 16 96% RA 97.7

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Atraumatic head

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No respiratory distress

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Heart is regular

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Lungs clear

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Abdomen is soft nontender

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Other things to check?

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# NEURO EXAM: OFF BALANCE, DIZZY

Cincinnati negative- are you done?

Cranial nerves: + nystagmus

Strength: symmetric

Sensation: normal

Coordination: unable to sit unsupported

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# OTHER TOOLS



Glucose: 95



EKG: normal sinus rhythm

# MODIFIED DIFFERENTIAL

Does this fit any clinical syndrome or make you concerned for a specific syndrome?

Acute onset

What system are our findings?



Communication to the hospital?

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**SOMETIMES IT'S NOTHING BUT**

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# WHAT HAPPENS IN THE FIELD MATTERS

- Symptom management
    - Time to pain medications, antiemetics, etc. significantly decreased
  - Initiation of some treatments decreases hospital duration
    - Steroids for Asthma
  - You can leave nothing but observation for the ED
    - Anaphylaxis, overdose
  - Some early treatments decrease mortality
    - Fluids in sepsis
  - Early notification prevents missed diagnosis and decreases time to intervention
    - STEMI, Stroke, trauma, atypical presentations of badness
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