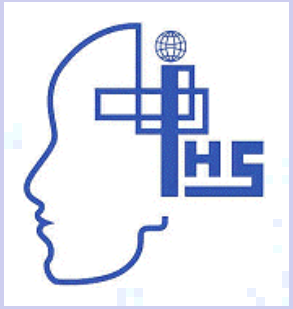


Patient with Lots of Headaches

R. Allan Purdy, MD, FRCPC,FACP
Professor of Medicine (Neurology)
Dalhousie University, Halifax, Canada

Learning Issues

- Headaches that are very frequent need to have precise diagnosis.
- The history is very important and examination clues must be sought.
- Investigations are warranted in these patients, by in large.
- Treatment options must be specific.

First Stage

Case History

- 49 y/o woman with “attacks”: minutes,left sided tearing, nasal congestion & rhinorrhea; up to 17 times per day.
- Not sure she has ‘headache’ - attacks associated with tingling left throat and coughing.
- Neurological examination is ‘normal’.
- CT head scan is normal…..

Other Historical Facts

- She did not get agitated during these headaches.
- They were relatively new in onset late in life
- She tried very medications prescribed by her internist.
- She was concerned about her throat symptoms.

Physical Examination

- On examination she looks in good health and her vital signs were normal.
- She has no focal neurological signs and her general examination appears normal.
- There are no bruits in her head, orbit or neck.

Initial Impression

- She has frequent headaches of short duration associated with neurological symptoms and signs. Importantly these suggested involvement of the autonomic nervous system. But this was by history alone with no supporting evidence.

First Stage Questions

- At this stage can you consider three differential diagnoses for this case?
- Is there any other information you would like to know about the case?
- What about her throat symptoms?
- What initial investigations, if any, would you like to consider?

Second Stage

More Analysis

- At this stage you would consider three important factors in her history:
  - She has frequent headaches late in life
  - She has autonomic symptoms and has some “atypical” features from common primary headaches
  - She has throat symptoms that do not seem to add up in the story…

More Analysis

- The main object of studying her history in detail is to determine if she has a secondary cause for her headaches, as some of these patients frequently do…
- Also do you need to do investigations and if so what?
- Do you need more opinions?

Symptom Analysis

- Frequent headaches are interesting and especially if they are of short duration and her headaches and symptoms last less than 15 minutes on each occasion.
- Also the autonomic symptoms are by history not documented and are not uncommon in many primary headache disorders including cluster or migraine.

Clinical Pearls

- In this setting and this type of case always consider a secondary disorder.
- Try getting collateral history or even images of the patient during an attack!
- A normal examination helps….

Any need to think Otherwise?

- There are no other important features in his history. She has had some mild hypertension over time and prior gall bladder removal, but nothing that suggests any other systemic disorder.

Lab and Investigations

- Preliminary blood work including a complete blood count, chest x-ray and a baseline unenhanced CT scan.
- She also had electrolytes, renal function and lipids done.

Second Stage Questions

- At this stage can you narrow your diagnosis a couple of entities?
- Can you analyze the case further based on what you know about this diagnosis?
- Any other investigations you would do and how would they be justified?
- Any immediate treatments options you would consider at this stage?

Third Stage

What is the diagnosis?

1. EPH
2. Cluster Headache
3. SUNCT
4. Temporal Arteritis
5. None of the above

Diagnosis

- The best working diagnosis is a TAC or trigeminal autonomic cephalalgia.
- The prototypic TAC of course is cluster and it is necessary to analyze based on IHCD 2 criteria and an understanding of the TACs why or why not it could be cluster headache…..

Trigeminal Autonomic Cephalalgias

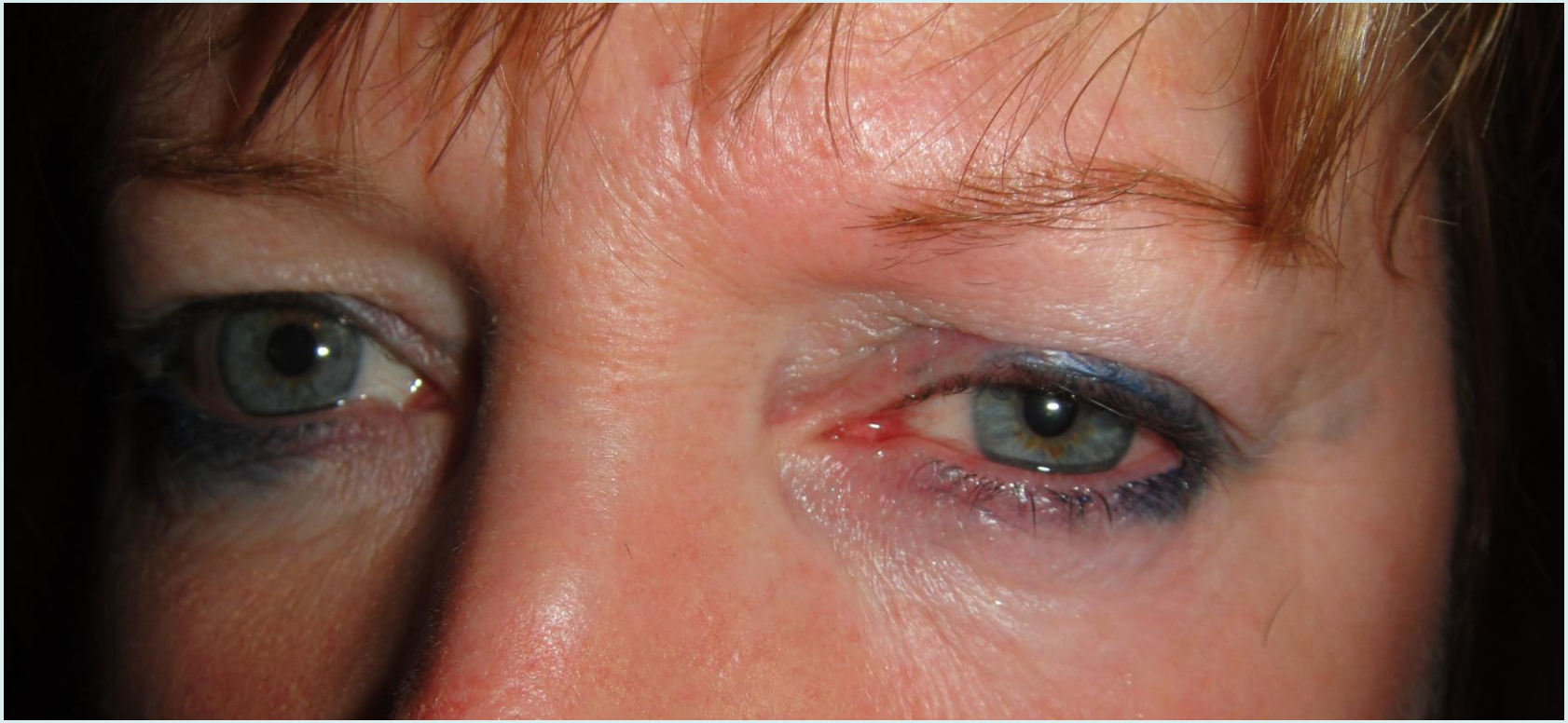
Feature	Cluster	PH	SUNCT	HC
Sex (M:F)	3:1	1:3	3:1	1:2
Attack duration	60 min	15 min	5-250 s	mins-days
Attack frequency	1-3/day	≥ 5/day	1/day-30/hr	variable
Autonomic features	**+**	**+**	**+**	**+**
Indocin effect	**+/-**	**+**	**-**	**+**

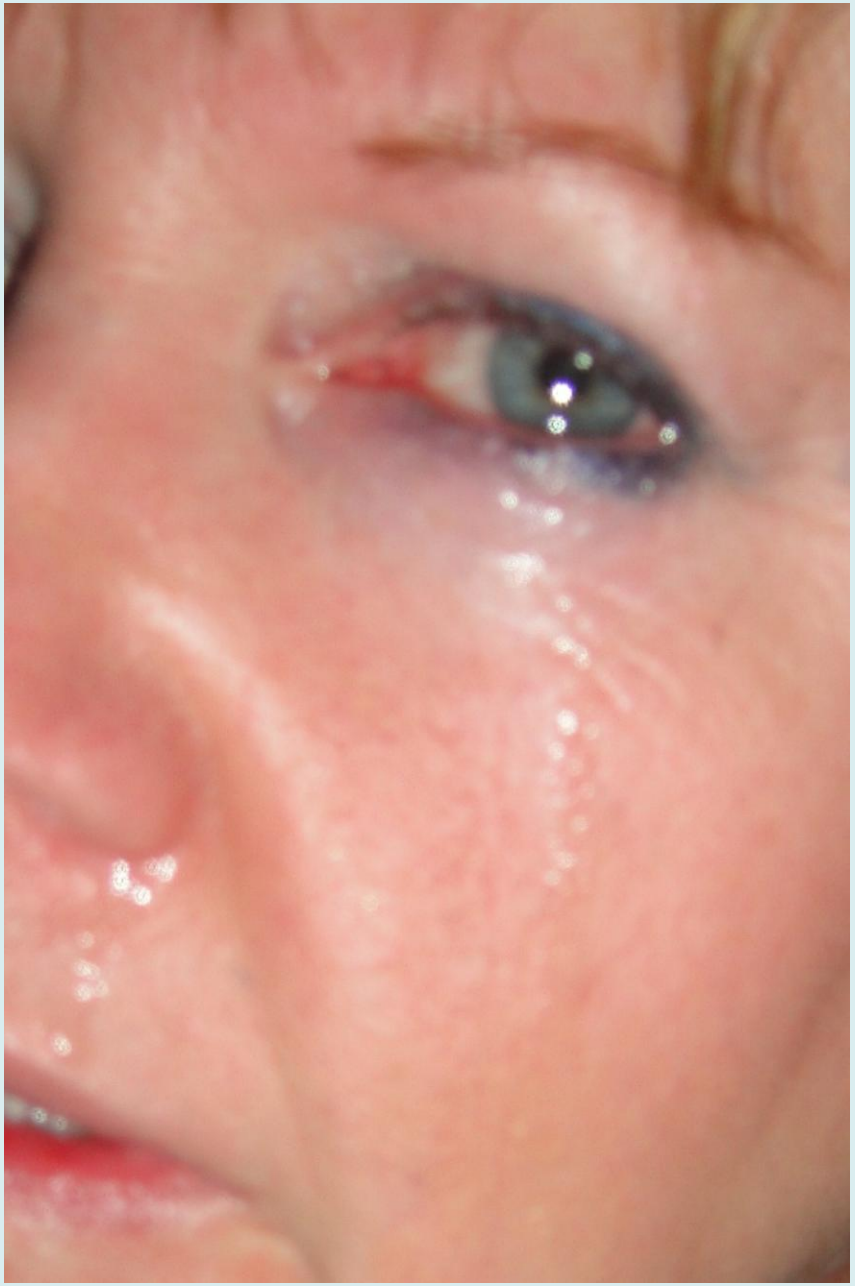
SUNCT = short-lasting unilateral neuralgiform pain with conjunctival injection and tearing syndrome; PH = paroxysmal hemicrania; HC = hemicrania continua

Goadsby PJ, Lipton RB. *Brain*. 1997.

Important information…

- The next two slides are cropped photos of the patient taken during an actual attack.
- These digital photos are priceless when it comes to making a precision diagnosis of this disorder.
- It is important to understand that collateral history and photos are very helpful in these kinds of cases…..



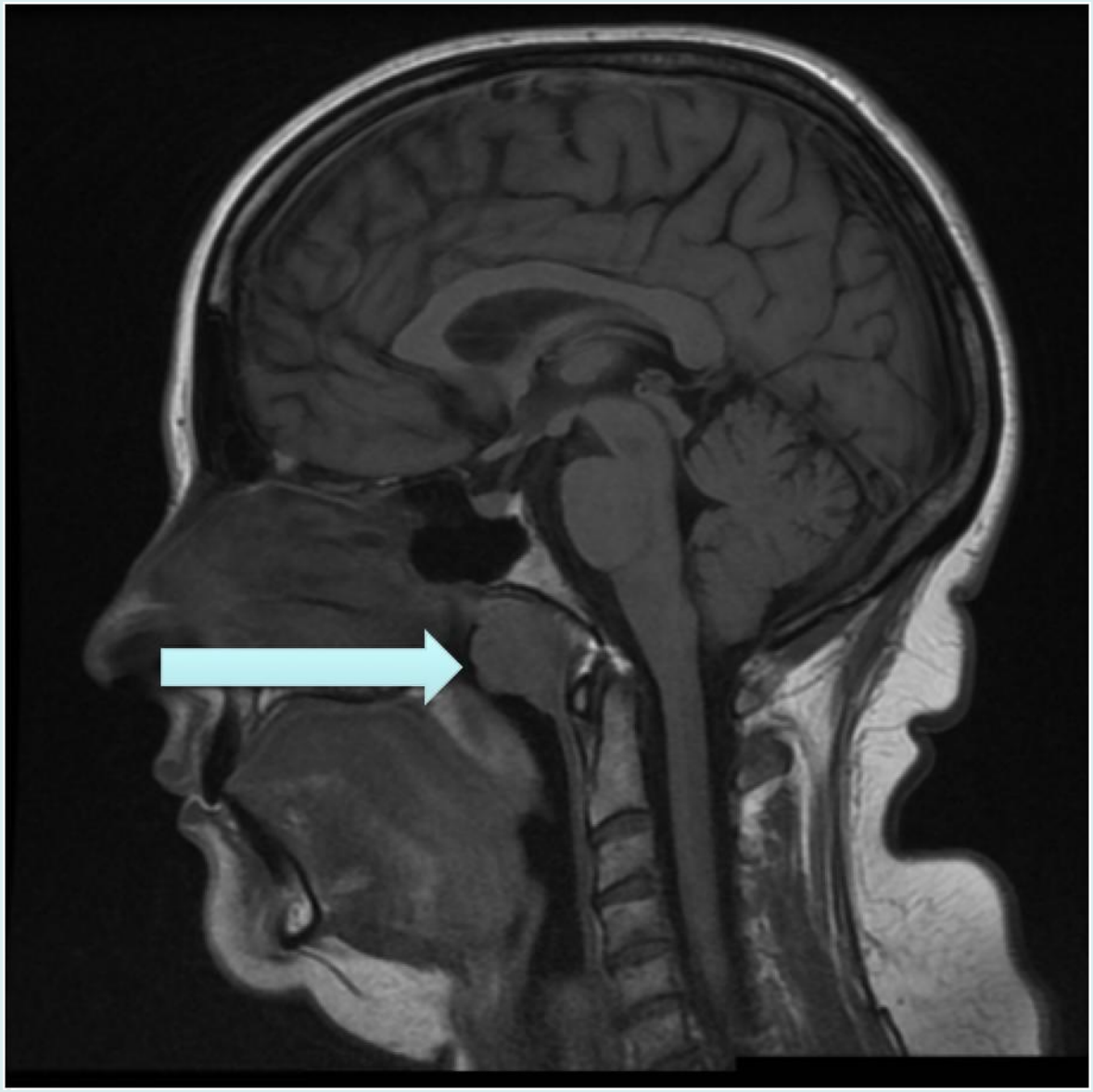


Diagnostic Points

- Notice in Photo 1 that she has narrowing of the palpebral fissure on the left and a smaller pupil on that side.
- The eye is also red, injected and beginning to tear.
- In Photo 2 there is lacrimation and rhinorhea occurring together…

Management Issues

- All of her blood work was normal
- Early treatment aborted the headache.
- CT scan was normal
- MR scan of head and neck ordered because of the throat problem….



Third Stage Questions

- At this stage how certain of your in this case?
- Any other investigations you would do and how would they be justified?
- Can you suggest long term management recommendations for this case?
- Are there any issues in long term management of cases like this one?

Final Stage

The ENT Assessment

- Following the result of the MR scan an ENT consultation was obtained.
- The tissue in the retropharyngeal space was observed directly and biopsied.
- It was found to be glandular tissue without any particular malignant histology and was thought to be non specific….
- No particular treatment was suggested….
- Eventually the throat symptoms subsided..

Long-term Followup

- Six months later after initiation of treatment the patient was contacted
- She found most of her attacks had stopped and she no longer needed therapy….
- If she had any feeling of a returning event then low dose medication took care of the symptoms…

Final Diagnosis

- This is a case of *EPH*.
- The case demonstrates the usual features of the disorder as well as concepts about immediate and long term management.
- The headache of this disorder is quite specific among the TACs..
- Nevertheless it did need to be investigated and followed…

End of Case!

References Available!