ESIM winterschool 2012 Clinical Case Presentation



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Sinitial presentation

35-year old female patient

admitted to the hospital in suspicion of pyelonephritis >back pain for a week >now flank pain >shivering, nausea, and vomiting >anuria since the day before

PMHx: none

Medication: none

Social Hx:

Cuban, living in Germany for 2 years nowmarried, no children



Physical examination

Main findings: <u>neurology:</u> paraparesis of legs with reduced sensory function

<u>abdomen:</u> bowel sounds decreased pressure pain in the lower abdomen full bladder

> additional findings: general aspect: reduced normal weight (56kg, 163cm, BMI 21kg/m^2) no fever (37,6°C)

cardiorespiratory: stable (P 75/min, RR 130/75)

Laboratory results

- **HGB** (12.3-15.3): 12.6 g/dl
- **PLT** (130-350): 254.6 g/l
- **CK** (0-170): **12,000 U/I**; CKMB (7-25): **329 U/I**
- **Na** (135-147): 142 mmol/l
- CRP (< 5): 6.3 mg/l
- **Crea** (0.6-1.0): 0.69 mg/dl
- elektrophoresis: IgG-gammopathy (700-1600mg/dl): 1790.0
- urinalysis: without pathological findings

Key findings up to this point????????

main diagnostic hypothesis

Suggestions?????????

dd: paraparesis

dd: urinary retention

dd: ck increase



Additional diagnostic work-up (I): laboratory studies

- > C3 (90-180): 107 mg/dl
- C4 (10-40): 13.4 mg/dl
- > cANCA: neg.
- > **pANCA**: neg.
- > ENAS: positive
- ENAP: SSA-AK

serologic testing:

- > Syphillis (pox): neg.
- BorrlgG (borreliosis): neg.
- > HBsAK: neg.
- ▹ HCV AK: neg.
- ▹ HIV: neg.

Additional diagnostic work-up (II):

<u>MRI</u>: T2 showed multiple and confluent high signal intensities within the spinal cord; diffuse swelling

-> myelitis C2 – TH1

T Yamamoto, S Ito, T Hattari (2006) Acute longitudial myelitis as the initial manifestation of SS; J Neural Neurosurg Psychiatry; 77:780



Additional diagnostic work-up (III):

Salivary gland biopsy: focal lymphocytic sialadenitis,

(50 or more lymphocytes per 4 mm²)



 $http://alf3.urz.unibas.ch/pathopic/getpic-img.cfm?id{=}8280$



normal parotid histology

http://pathology.mc.duke.edu/website/images/grad/Histo_course/ parotid.jpg

diagnosis: Sjogren-Syndrome



American-European Classification Criteria (09/2011)

- Ocular symptoms of inadequate tear production
- Ocular signs of corneal damage due to inadequate tearing
- Oral symptoms of decreased saliva production
- Salivary gland histopathology demonstrating foci of lymphocytes
- Test indicating impaired salivary gland function
- Presence of autoantibodies (anti-Ro/SSA and/or anti-La/SSB)

Course of disease & treatment approaches

-> progression of hemiplegia during first 3 days after admission

high-dose corticosteroid therapy for 5 days (1g/d)
-> aggravation: onset of tetraplegia & respiratory insufficiency causing need for intubation/
BIPAP-ventilation

>switch to an adjunction:

non-steroidal immunosuppressant: cyclophosphamide 1 g every 3 weeks

plus

corticosteroids (1000 mg/d)

-> decrease of ck-levels to normal, but still neurological symptoms

>therapeutic stepping up:

high dose cyclophosphamide (30g) for 5 days

-> the patient was able to move her right arm after a week of treatment

Therapeutic alternatives in literature:

fulminant development ---- \rightarrow application of rituximab indicated?????

Follow-up

> 4-6 weeks after onset of treatment:

the patient was slowly able to move her right side and left arm

- consecutively CPAP weaning possible, after 3 months of hospital stay: effective extubation, transfer to rehabilitation
- resulting long-term damage:
 - hemiplegia (left)
 - sight disorder
- CAVE: patients with Sjögren syndrome have a higher rate of B-cell lymphoma (6-8 fold risk)

Key learning points

case complexity: medical benefits from an interdisciplinary team play

Idealistic view or reality in your daily working life??????

atypical manifestation of illnesses: a challenge for the detective in each of us



<u>References</u>

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