



CLINICAL CASE PRESENTATION

ESIM Winter School 2015
RIGA, LATVIA

Angélique Sadlon
University Hospital Basel



SWISS DELEGATION

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64 YEAR OLD MAN
brought in by ambulance

MAIN SYMPTOMS

- FEVER PEAKS IN THE LAST 2 WEEKS
- LACK OF COORDINATION IN THE LEFT HAND

R(eview) O(f) S(ystems):

- 2 days of diarrhea in the last week
- Chronic productive cough
- No weight lost, no night sweats

PERSONAL HISTORY

- ALCOHOL DEPENDENCY (PAST STORY ACCORDING TO THE PATIENT...)
- DILATATIVE CARDIOMYOPATHY (2009)

MEDICATION

- Carvedilol Tbl 12.5 mg 1-0-0
- Torasemid Tbl 5 mg 1-0-0
- Enalapril Tbl 10 mg 1-0-0
- Acidum acetylsalicylicum Tbl 100 mg 1-0-0
- Pantoprazol Tbl 40 mg 1-0-0

TOBACCO CONSUMPTION: stopped in 2009, before 60 UPY

ALCOHOL CONSUMPTION: 2 beers/Day (sometimes more...)

INITIAL
PRESENTATION

CLINICAL
AND LAB.
FINDINGS

WORK UP

IMAGING

DIFF
DIAGNOSIS

DIAGNOSIS

MANAGEMENT

KEY
MESSAGES



- GCS 15
- Vital Signs: 38.8°, BD 105/55 mmHg, pulse 115/mn
- NEURO: no sign of nuchal rigidity, left hemiparesis, left bradydiadochokinesis, left dysmetria, ataxia
- LUNGS: discrete endexpiratory wheezing
- CV: no pathological heart sounds
- ABDOMEN: no anomalies
- No pathological lymphnodes

LABORATORY FINDINGS

- HEMATOLOGICAL VALUES
 - MCV: 110 fl (79.0-95 fl)
 - Thrombocytes 140 G/L (150-450 G/L)
 - Leucocytes 8 G/L (N: 3.5-10 G/L)
- CHEMISTRY
 - gammaGT 136 U/L (12-68 U/L)
 - LDH 470 U/L (135-225)
 - C-Reactive Protein: 7.5 mg/L (<10 mg/L)
- SERUM ALCOHOL: negative

OTHER FINDINGS

- RX THORAX: Peribronchial Cuffing
- ECG: AF (new)

INITIAL MANAGEMENT

- Blood Cultures 2x2,
- Paracetamol 1 g iv

CLINICAL EXAMINATION

LABORATORY VALUES

OTHER INVESTIGATIONS

INITIAL MANAGEMENT

INITIAL PRESENTATION

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KEY MESSAGES

WHAT IS THE MECHANISM BEHIND THE ACTUAL CLINICAL PRESENTATION?



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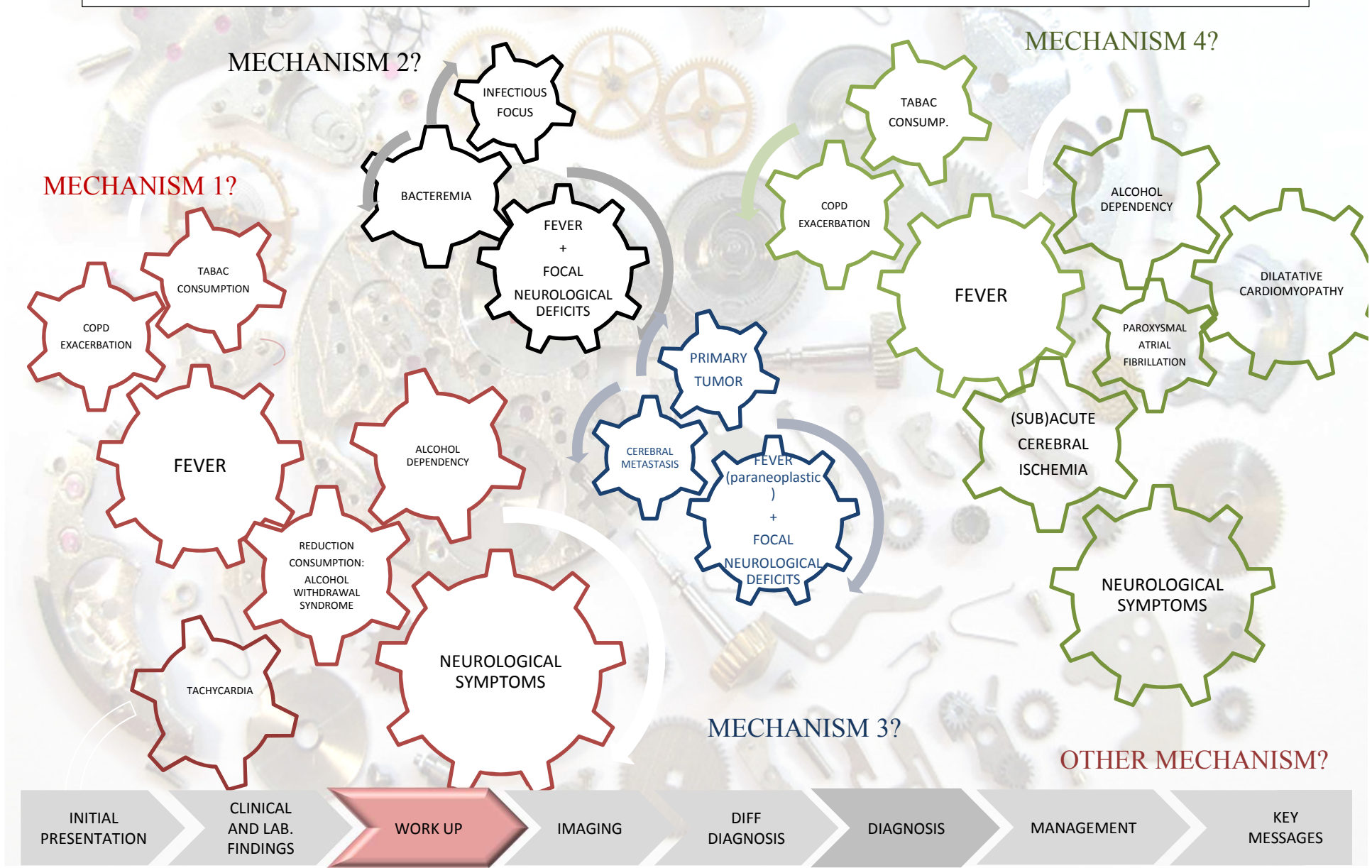
DIFF
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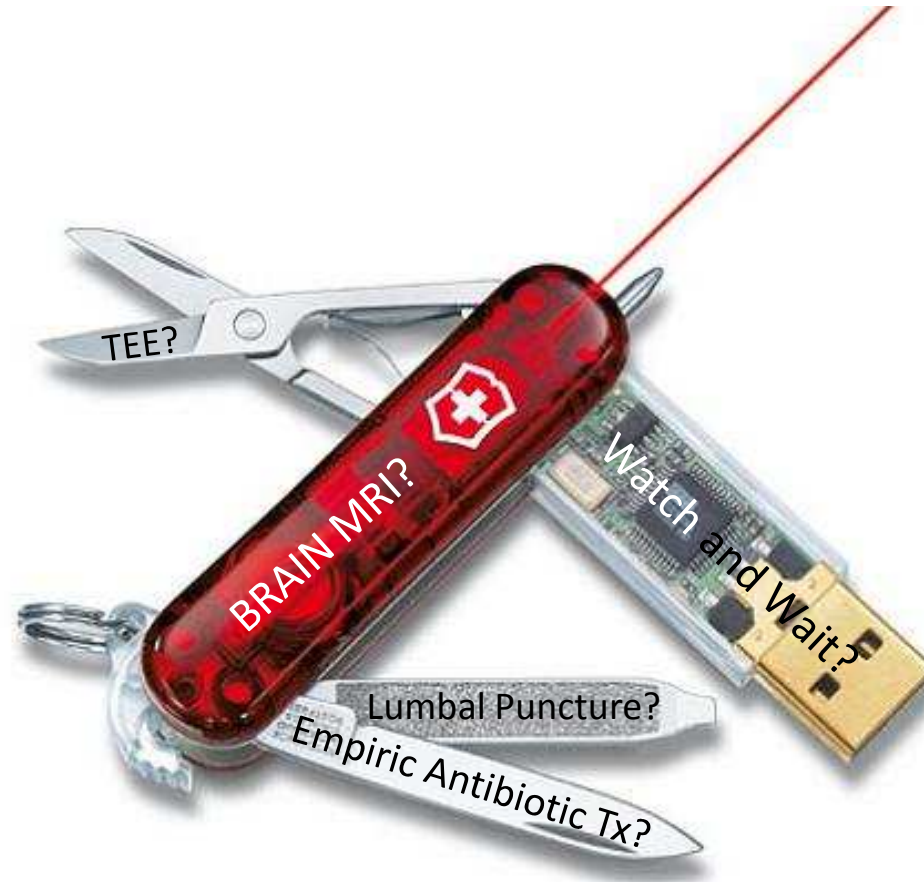
MANAGEMENT

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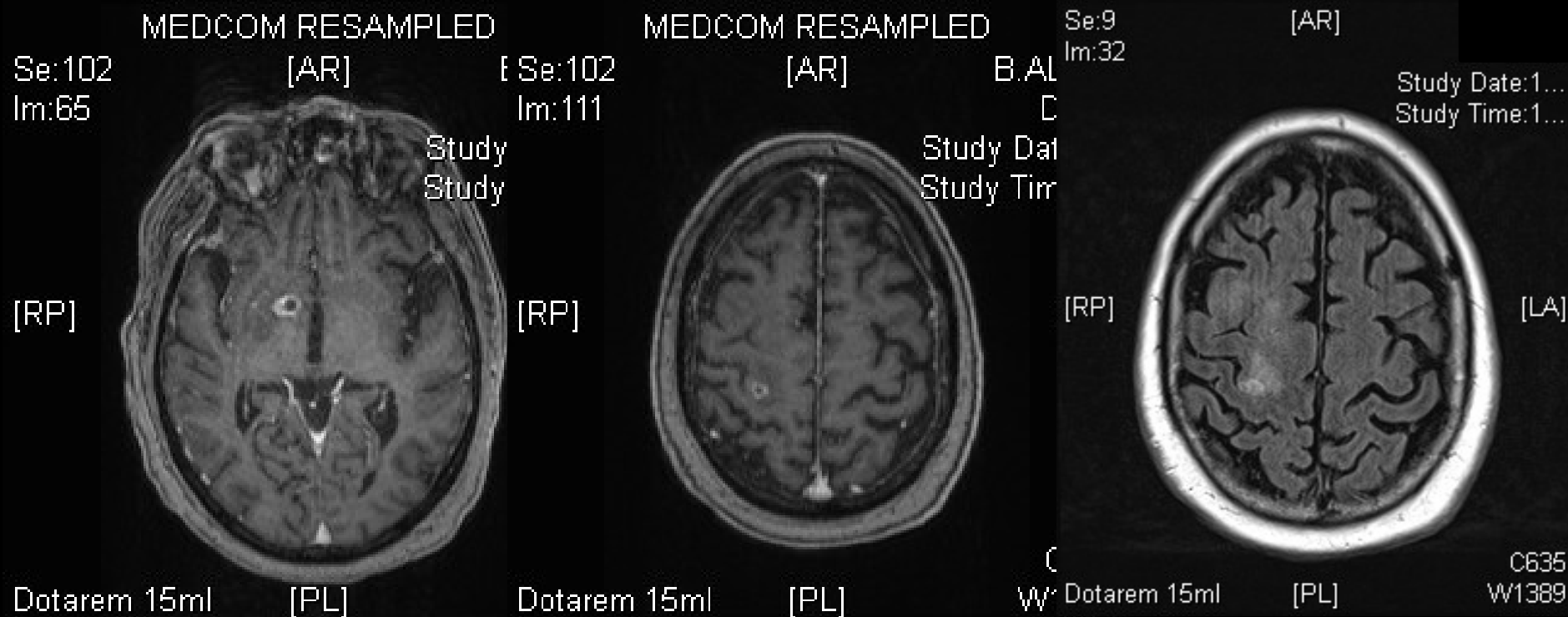
WHAT IS THE MECHANISM BEHIND THE ACTUAL CLINICAL PRESENTATION?



(IF YOU HAD THE CHOICE)
WHAT WOULD YOU DO NEXT?



BRAIN MRI (WITH CONTRAST)



- **Cerebritis**
- **Multiple small abscesses (e.g: capsula interna right, pallidum right, precentral right)**



BRAIN ABSCESSSES

Direct Spread
(from contiguous site)

- Otitis media
- Mastoiditis
- Sinusitis
- Dental infection
- Post Neurosurgical Intervention

NO CLINICAL SIGNS

*NO PAST
NEUROSURGICAL INTERVENTION*

Hematogenous Spread from infectious focus

Blood Cultures:
?

**DIFFERENTIAL
DIAGNOSIS
BRAIN ABSCESSSES**

Metastatic or primary brain tumors

*CT Neck-Thorax-Abdomen-Pelvis:
NO ANOMALIES*

Septic cerebral emboli with associated infarction

*Trans Esophageal Echography:
NO SIGNS OF VEGETATIONS*

Pyogenic Meningitis

Epidural and subdural empyema

Septic dural sinus thrombosis

Radiological findings not typical

Mycotic cerebral aneurysms

Toxoplasma Encephalitis

HIV associated brain lesions
(e.g. Progressive multifocal leukoencephalopathy , HIV/CMV Encephalopathy)

HIV negative

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BLOOD CULTURE POSITIVE! (Time to Positivity: 20h)



Listeria Monocytogenes Sepsis

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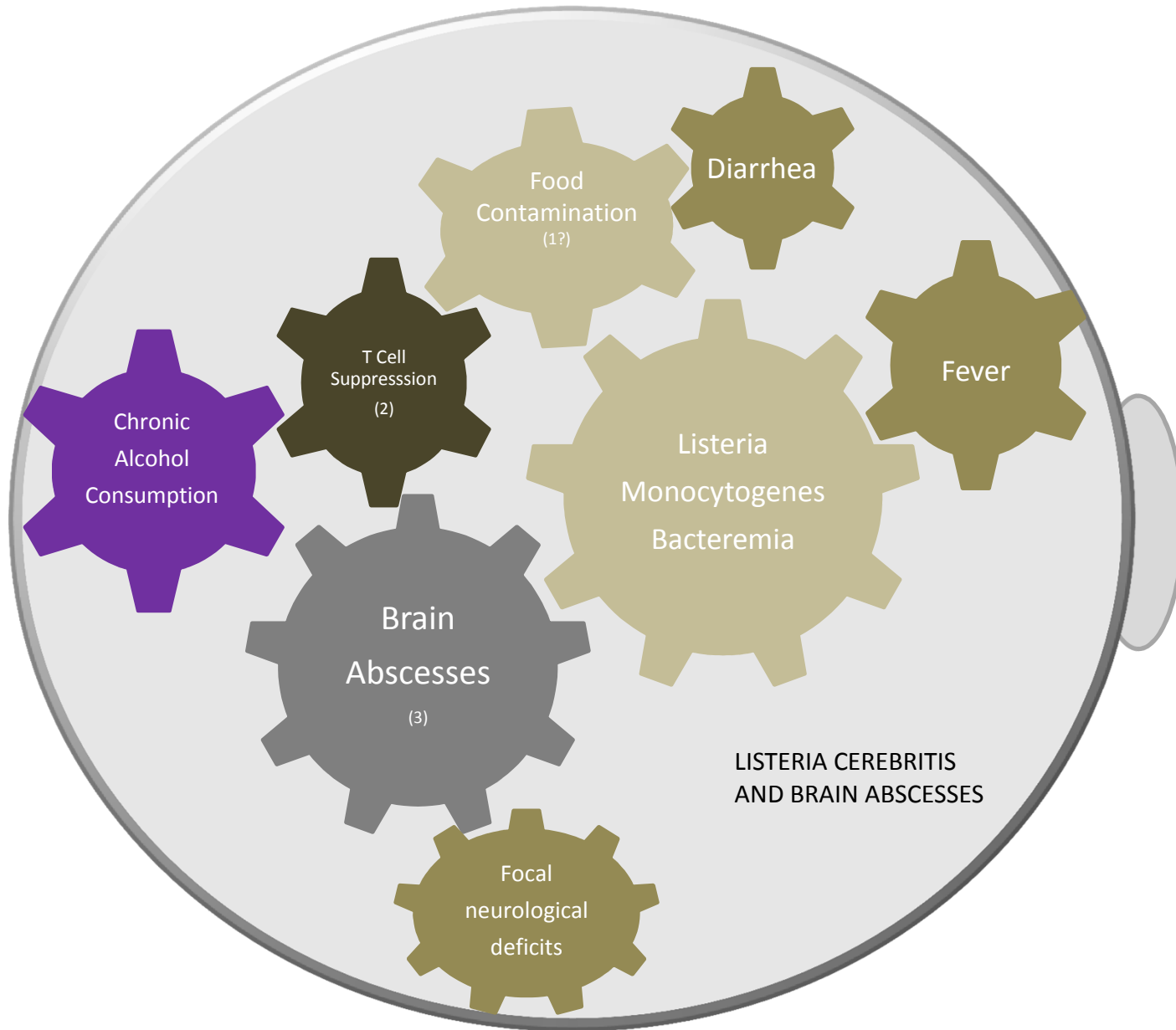
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1. November 2014, Switzerland:
Listeria found in
«Bündner Salsiz» : origin?

2. Li X, Rendon JL, PLoS ONE
9(8): e105314. doi: 10.1371/
journal.pone.0105314

3. Cone LA et al, Surg Neurol
2003;59:320-8



TREATMENT AND CLINICAL COURSE

- Beginn with first line regimens
 - Ampicillin 2g iv every four hours
 - Gentamicine (3 mg/kg per day iv divided in three doses)
- Gentamicin stopped after ~2 weeks because of ototoxicity
- Duration therapy: 8 weeks
- Control MRI Brain (3 weeks after): abscesses reduced in size



KEY MESSAGES

- ~ 6.5% of all age groups with listeriosis present with nonmeningitic cerebritis, meningoencephalitis, rhombencephalitis, ~ 1% will present with brain abscesses

Cone LA et al, Surg Neurol
2003;59:320-8

- Risk factors: pregnancy, corticosteroid therapy, other immunosuppressive conditions (cancer, AIDS, iron-overload, alcoholism, liver disease, diabetes, collagen-vascular disease)
- Gentamicin therapy indicated by CNS involvement





THANK YOU

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