Monica Ferlisi
UOC Neurologia A
AOUI Verona

SIMPOSIO CONGIUNTO SINC-LICE
CRISI RIPETUTE E STATO EPILETTICO IN AREA CRITICA

Fenotipi clinici e scale prognostiche

Fenotipo

A definition and classification of status epilepticus – Report of the ILAE Task Force on Classification of Status Epilepticus

*††‡Eugen Trinka, §Hannah Cock, ¶Dale Hesdorffer, #Andrea O. Rossetti, **Ingrid E. Scheffer, ††Shlomo Shinnar, ‡‡Simon Shorvon, and §§Daniel H. Lowenstein

Epilepsia, **(*):1–9, 2015
doi: 10.1111/epi.13121

For classification of SE, four axes are proposed:

1. **Semiology**
2. **Etiology**
3. **EEG correlates**
4. **Age**

They provide a *framework* for clinical diagnosis, investigation, and therapeutic approaches for each patient.

A definition and classification of status epilepticus – Report of the ILAE Task Force on Classification of Status Epilepticus

*††‡Eugen Trinka, §Hannah Cock, ¶Dale Hesdorffer, #Andrea O. Rossetti, **Ingrid E. Scheffer, ††Shlomo Shinnar, ‡‡Simon Shorvon, and §§Daniel H. Lowenstein

Epilepsia, **(*):1–9, 2015
doi: 10.1111/epi.13121

For classification of SE, four axes are proposed:

1. **Semiology**
2. **Etiology**
3. **EEG correlates**
4. **Age**

5. Treatment responsiveness?

They provide a *framework* for clinical diagnosis, investigation, and therapeutic approaches for each patient.

Axis 1: semiology

There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
    - Convulsive SE (tonic-clonic SE)
    - Myoclonic SE
    - Focal motor
    - Tonic status
    - Hyperkinetic SE

Il paziente con le convulsioni

Il paziente con le convulsioni

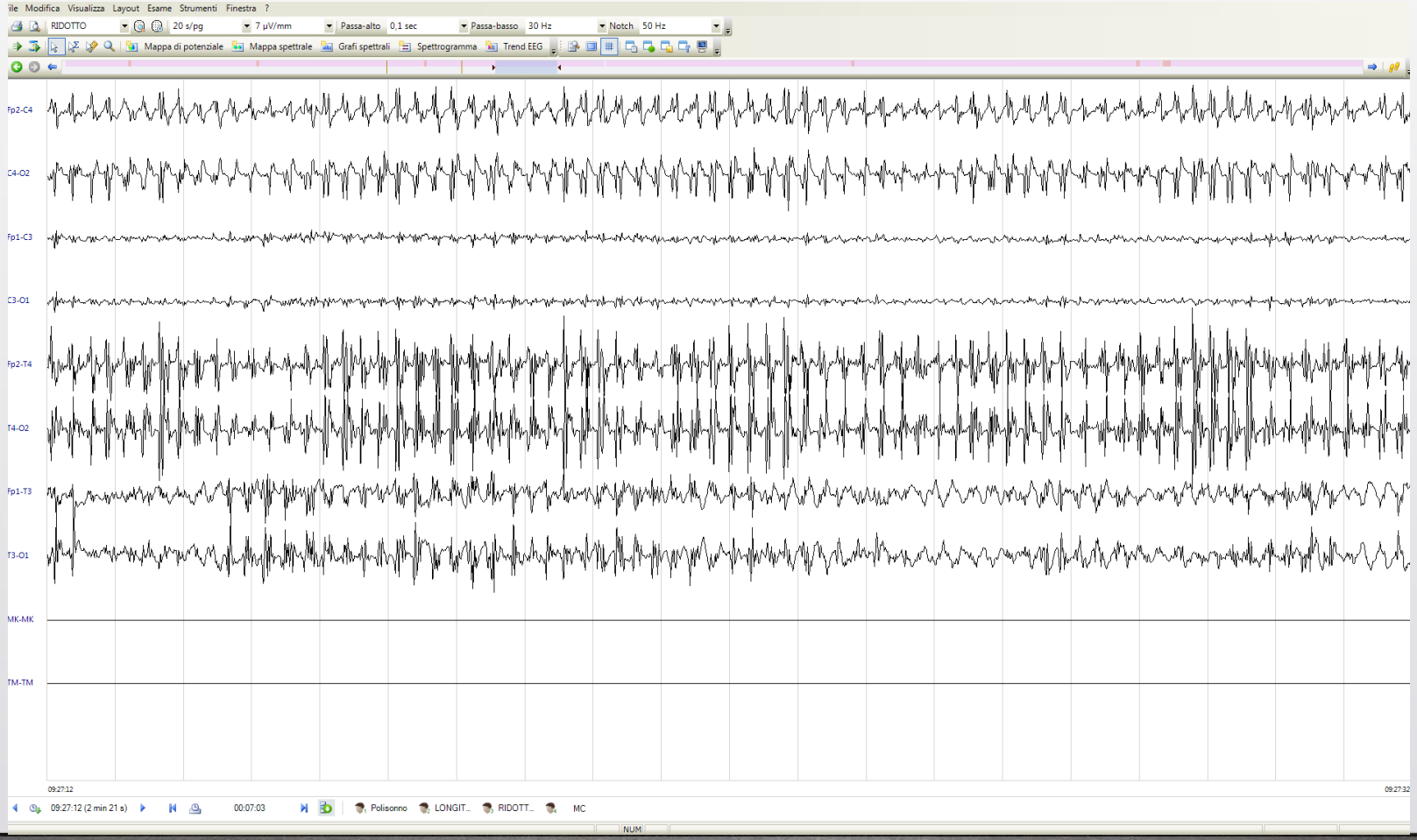
There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
    - Convulsive SE (tonic-clonic SE)
    - Myoclonic SE
    - Focal motor
    - Tonic status
    - Hyperkinetic SE

Il paziente con le convulsioni

There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
    - Convulsive SE (tonic-clonic SE)
      - Generalized convulsive
      - Focal onset >> bilateral convulsive
      - Unknown whether focal or generalized

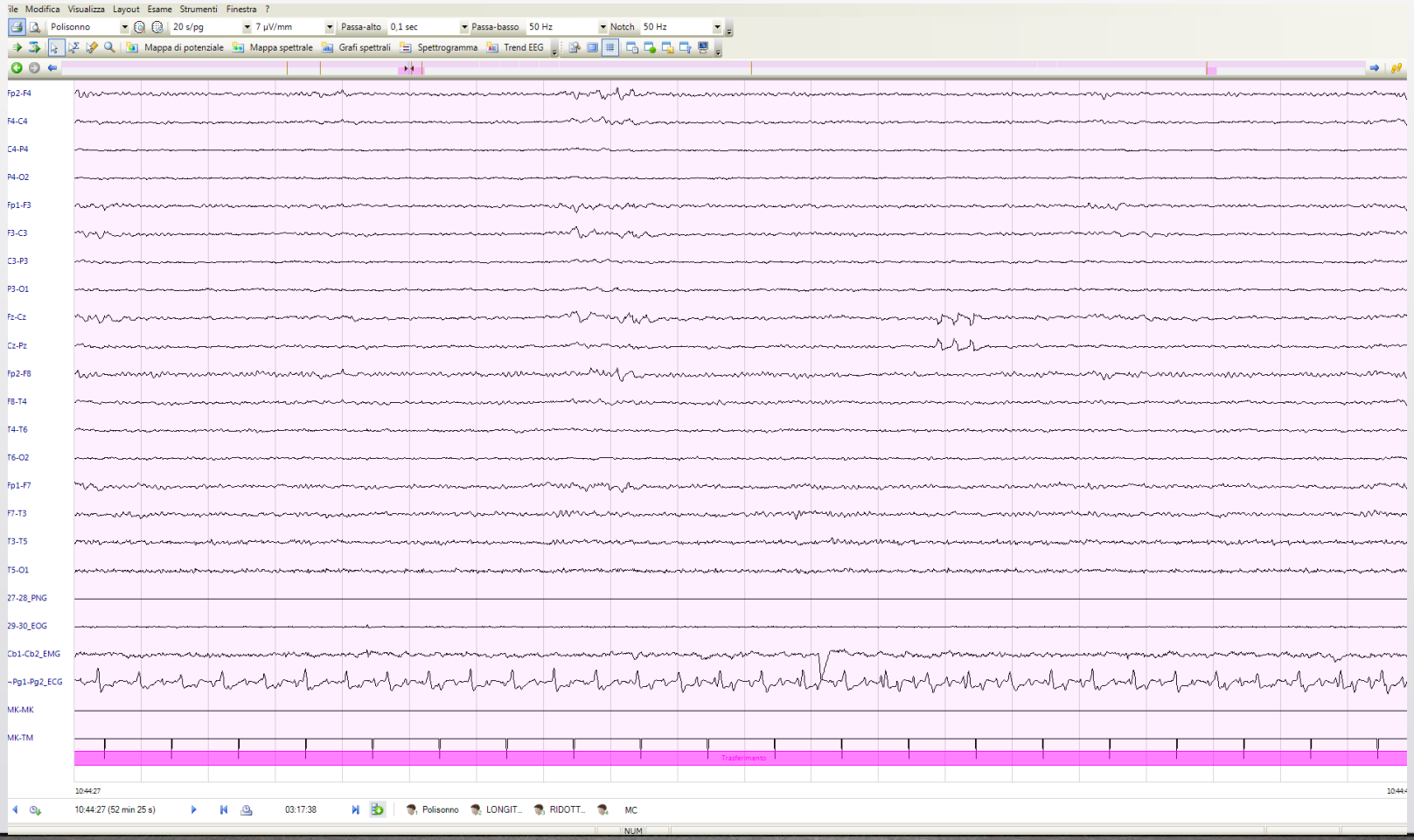

ile Modifica Visualizza Layout Esame Strumenti Finestra ?
RIDOTTO
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 30 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-C4
C4-O2
Fp1-C3
C3-O1
Fp2-T4
T4-O2
Fp1-T3
T3-O1
MK-MK
TM-TM
09:27:12
09:27:32
09:27:12 (2 min 21 s)
00:07:03
Polisonno
LONGIT...
RIDOTT...
MC
NUM

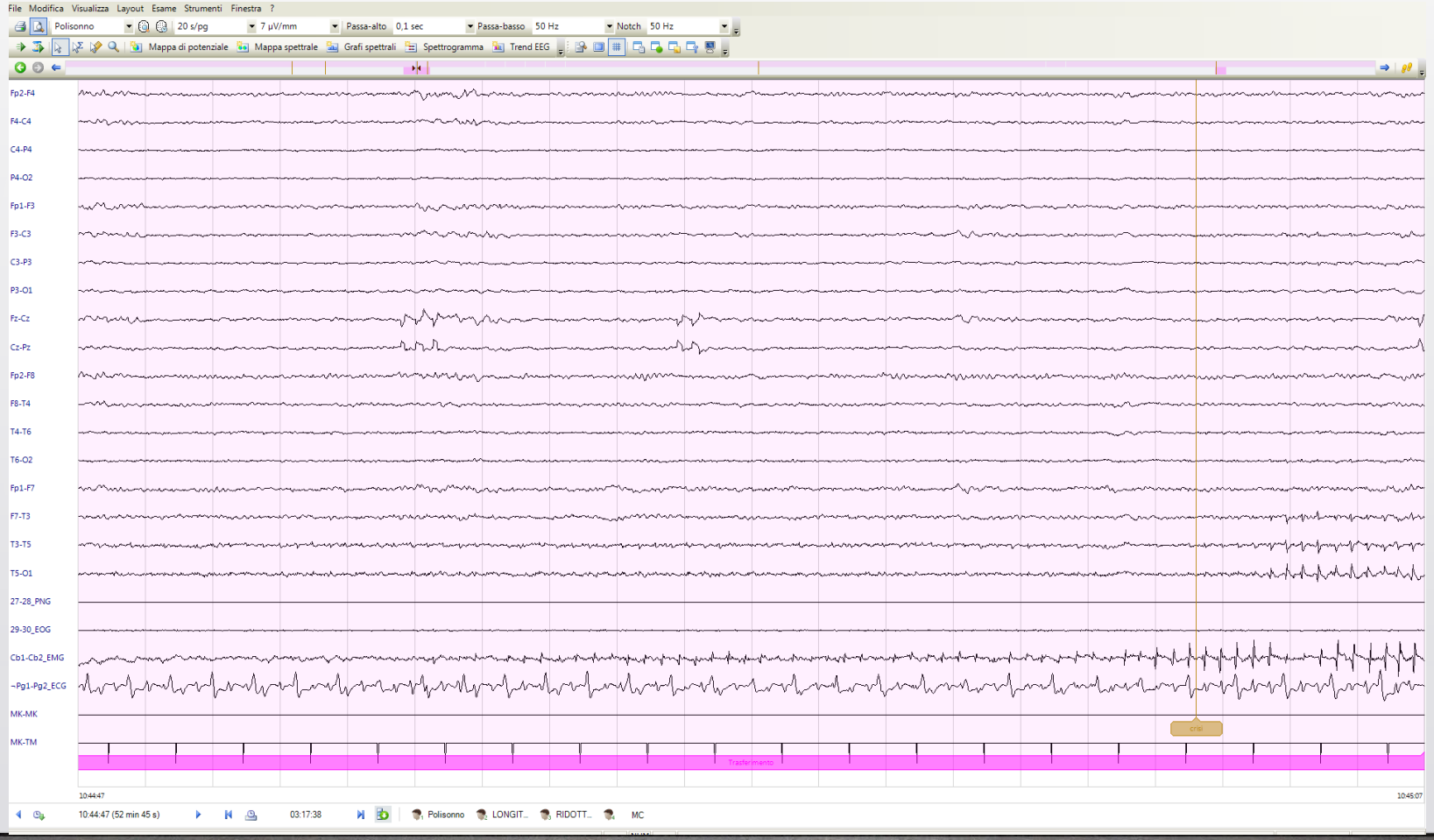
Axis 1: semiology

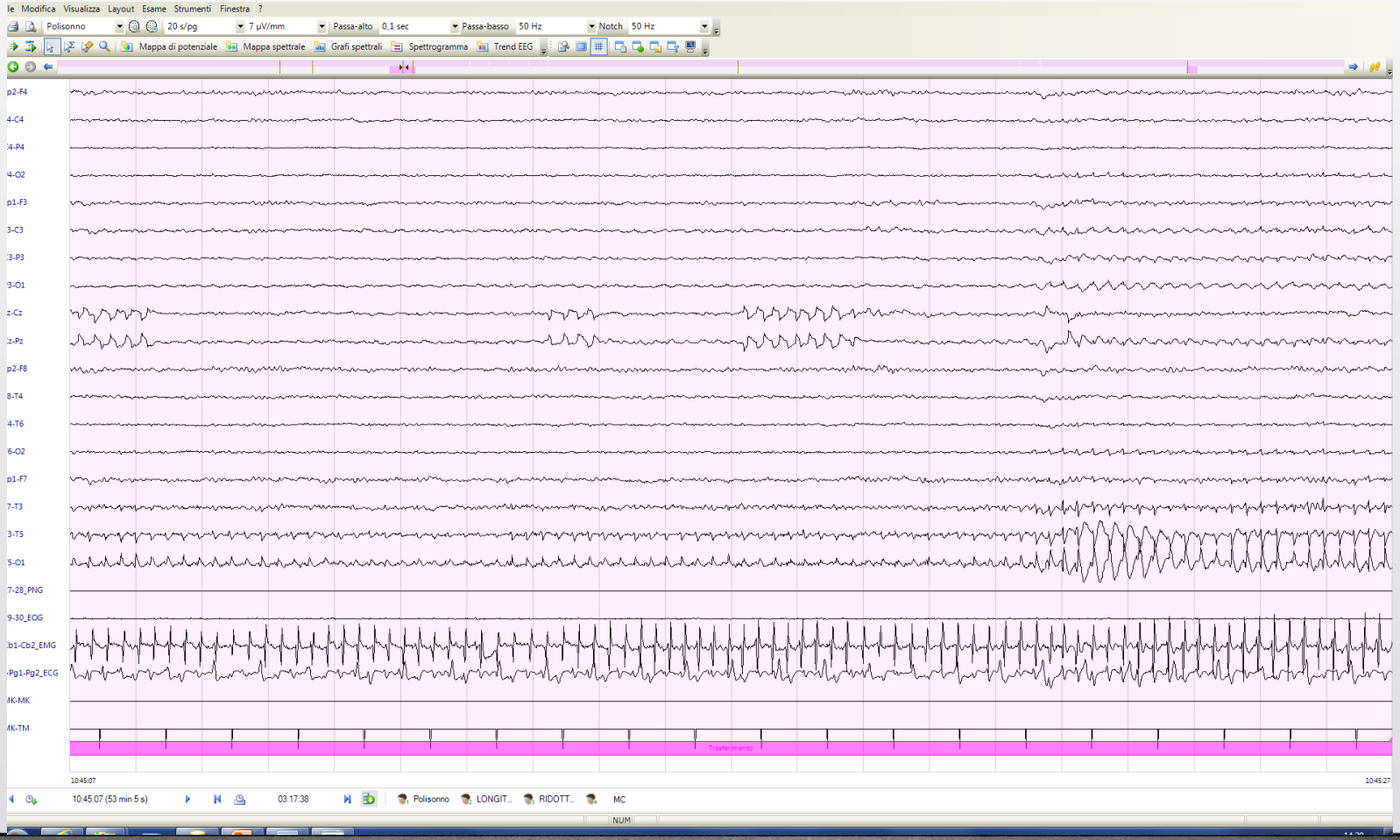
There are two main taxonomic criteria:

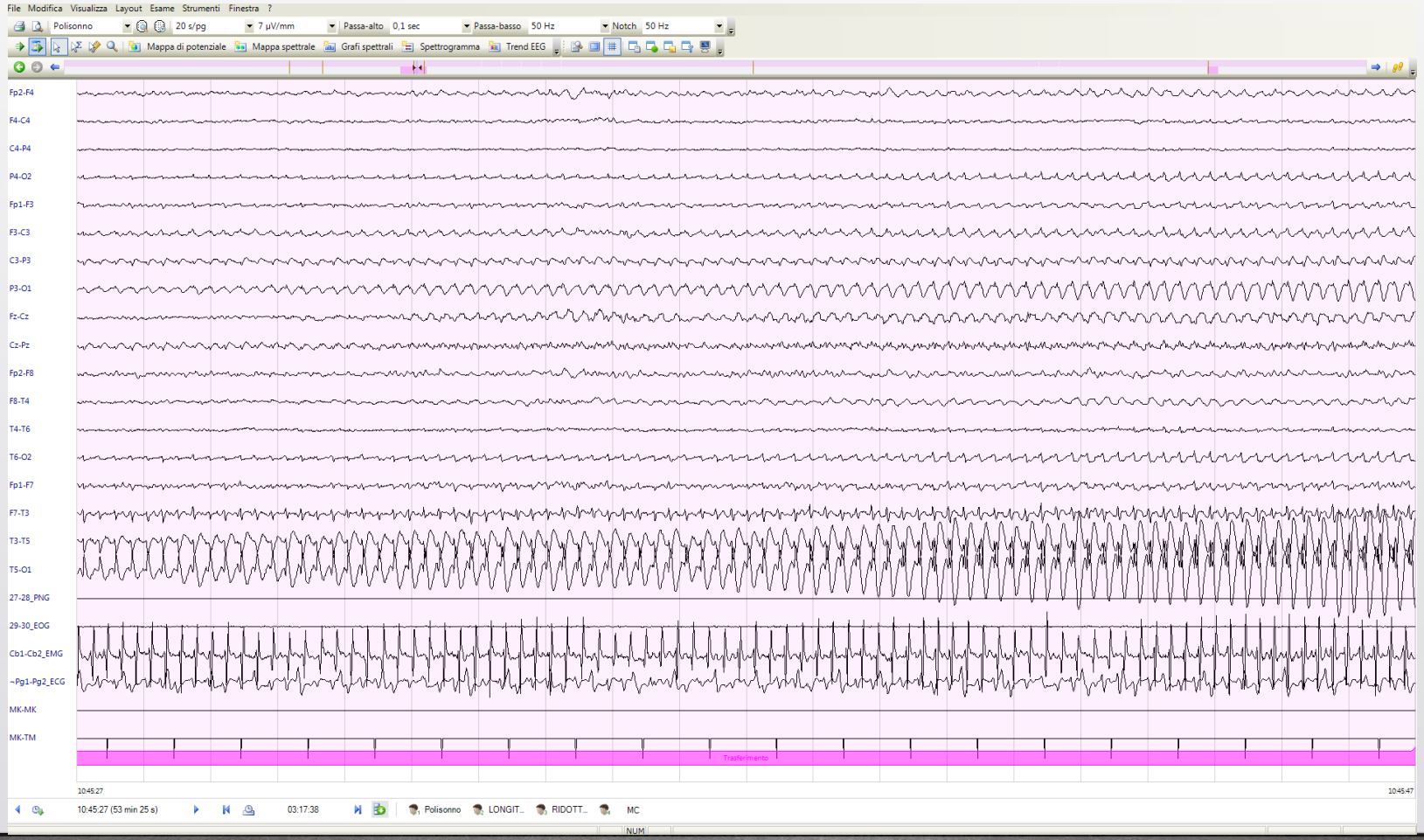
- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
    - Convulsive SE (tonic-clonic SE)
    - Myoclonic SE
    - Focal motor
    - Tonic status
    - Hyperkinetic SE

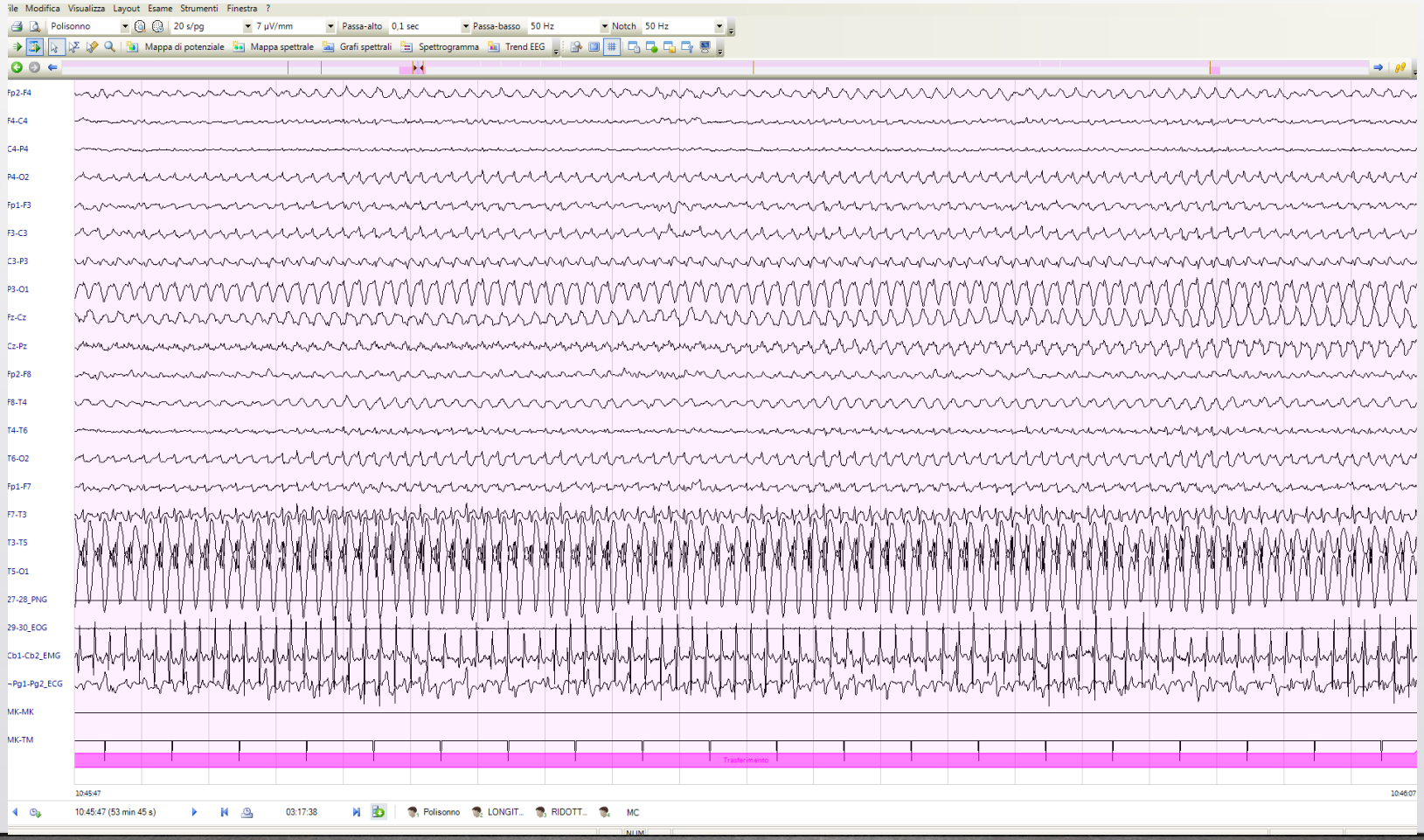
Il paziente con mioclono


ile Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
27-28_PNG
29-30_EOG
Cb1-Cb2_EMG
~Pg1-Pg2_ECG
MK-MK
MK-TM
Trasferimento
10:44:27
10:44:27 (52 min 25 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC
NUM


File Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
27-28_PNG
29-30_EOG
Cb1-Cb2_EMG
~Pg1-Pg2_ECG
MK-MK
MK-TM
crisi
Trasferimento
10:44:47
10:45:07
10:44:47 (52 min 45 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC


le Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
p2-F4
4-C4
4-P4
4-O2
p1-F3
3-C3
3-P3
3-O1
z-Cz
z-Pz
p2-F8
8-T4
4-T6
6-O2
p1-F7
7-T3
3-T5
5-O1
7-28_PNG
9-30_EOG
b1-Cb2_EMG
Pg1-Pg2_ECG
MK-MK
MK-TM
Trasferimento
10:45:07
10:45:27
10:45:07 (53 min 5 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC
NUM


File Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
27-28_PNG
29-30_EOG
Cb1-Cb2_EMG
~Pg1-Pg2_ECG
MK-MK
MK-TM
Trasferimento
10:45:27
10:45:47
10:45:27 (53 min 25 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC
NUM


ile Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
27-28_PNG
29-30_EOG
Cb1-Cb2_EMG
-Pg1-Pg2_ECG
MK-MK
MK-TM
Trasferimento
10:45:47
10:46:07
10:45:47 (53 min 45 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC

File Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
27-28_PNG
29-30_EOG
Cb1-Cb2_EMG
~Pg1-Pg2_ECG
MK-MK
MK-TM
Trasferimento
10:46:07
10:46:27

le Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
p2-F4
4-C4
4-P4
4-O2
p1-F3
3-C3
3-P3
3-O1
z-Cz
z-Pz
p2-F8
8-T4
4-T6
6-O2
p1-F7
7-T3
3-T5
5-O1
7-28_PNG
9-30_EOG
b1-Cb2_EMG
Pg1-Pg2_ECG
MK-MK
MK-TM
trattato...
Trasferimento
10:46:27
10:46:4
10:46:27 (54 min 25 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC

ile Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
27-28_PNG
29-30_EOG
Cb1-Cb2_EMG
Pg1-Pg2_ECG
MK-MK
MK-TM
Trasferimento
10:46:47
10:47:07
10:46:47 (54 min 45 s)
03:17:38
Polisonno
LONGIT...
RIDOTT...
MC

Il paziente con mioclono

There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
    - Convulsive SE (tonic-clonic SE)
    - Myoclonic SE
    - Focal motor
    - Tonic status
    - Hyperkinetic SE

Il paziente con mioclono

There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
    - Convulsive SE (tonic-clonic SE)
    - Myoclonic SE (prominent epileptic myoclonic jerks)
      - <u>With coma</u>
      - Without coma

Axis 1: semiology

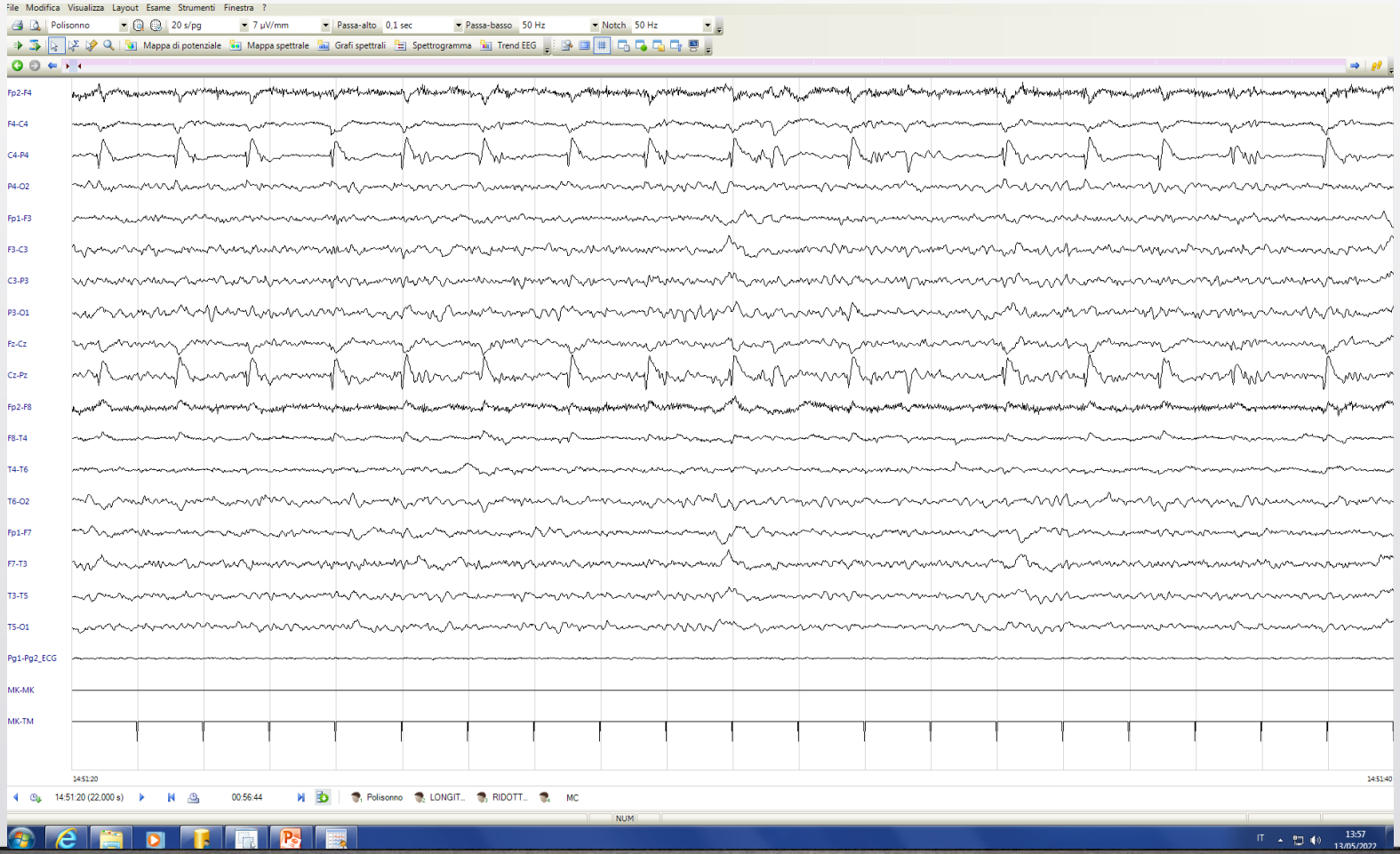
There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
  - Without prominent motor symptoms

Axis 1: semiology

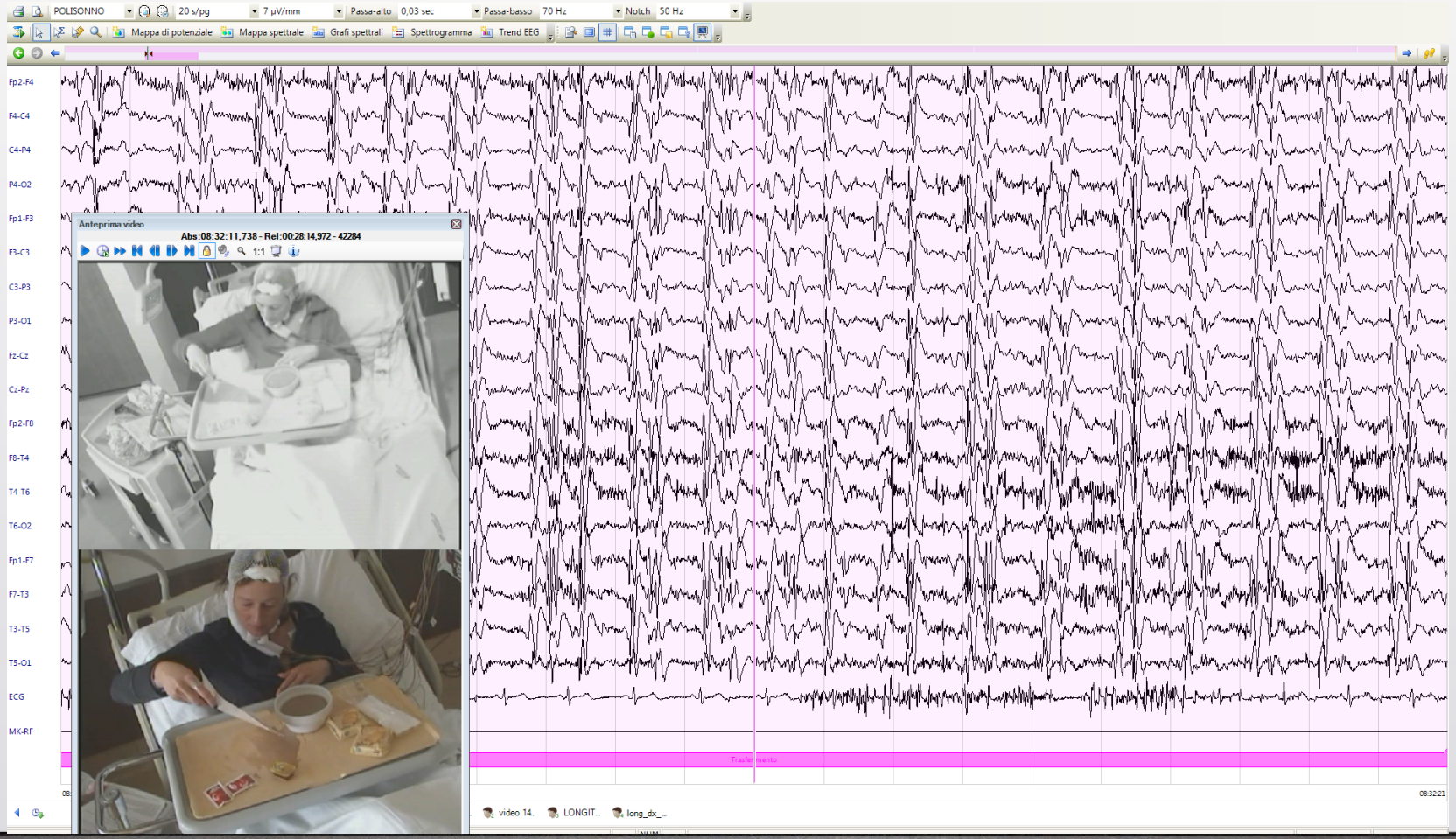
There are two main taxonomic criteria:

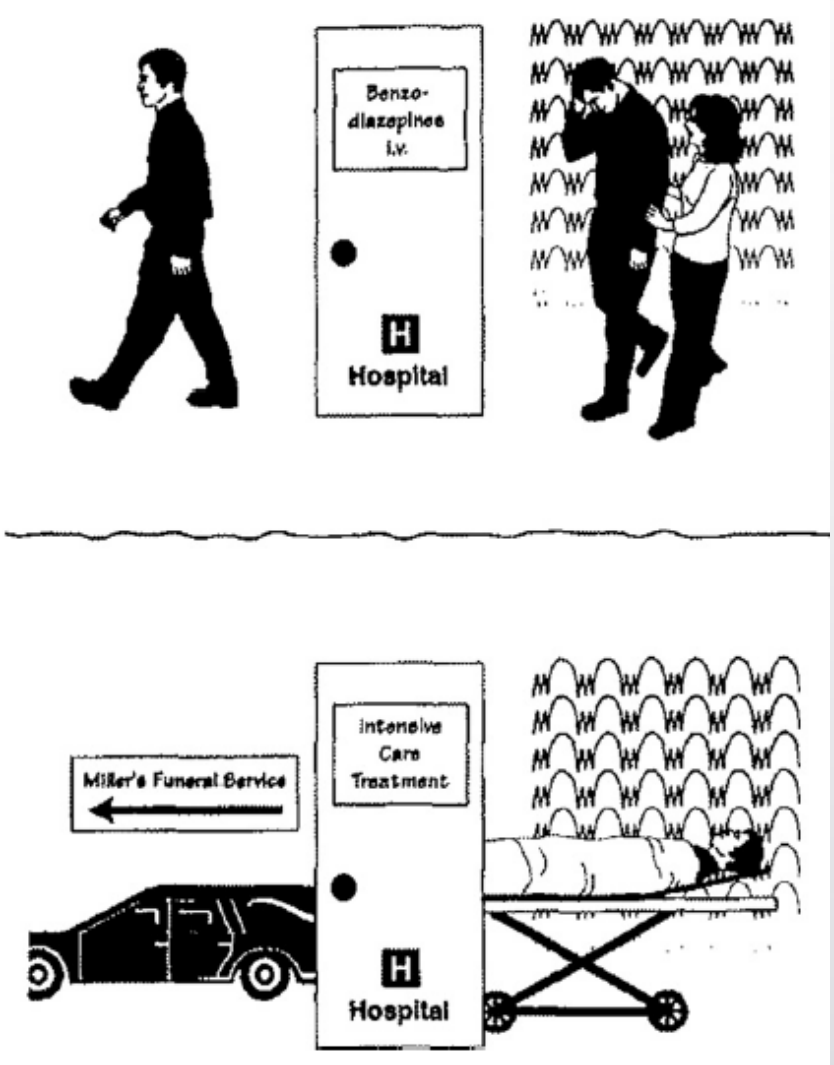
- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
  - Without prominent motor symptoms
    - NCSE with coma (including “subtle” SE)
    - NCSE without coma


File Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
Pg1-Pg2_ECG
MK-MK
MK-TM
14:51:20
14:51:40
14:51:20 (22,000 s)
00:56:44
Polisonno
LONGIT...
RIDOTT...
MC
NUM
IT
13:57
13/05/2022

File Modifica Visualizza Layout Esame Strumenti Finestra ?
Polisonno
20 s/pg
7 µV/mm
Passa-alto 0,1 sec
Passa-basso 50 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
Pg1-Pg2_ECG
MK-MK
MK-TM
14:51:20
14:51:40
Anteprima video
Abs:14:51:28,043 - Rel:00:00:29,981 - 700
1:1
14:51:28 (30,000 s)
00:56:44
Polisonno
LONGIT..
RIDOTT..
MC
NUM
IT
13:59
13/05/2022

File Modifica Visualizza Layout Esame Strumenti Finestra ?
POLISONNO
20 s/pg
7 µV/mm
Passa-alto 0,03 sec
Passa-basso 70 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
ECG
MK-RF
Trasferimento
08:32:01
08:32:21
08:32:01 (28 min 4 s)
07:29:24
Sonno rid..
video 14..
LONGIT..
long_dx_..
NUM

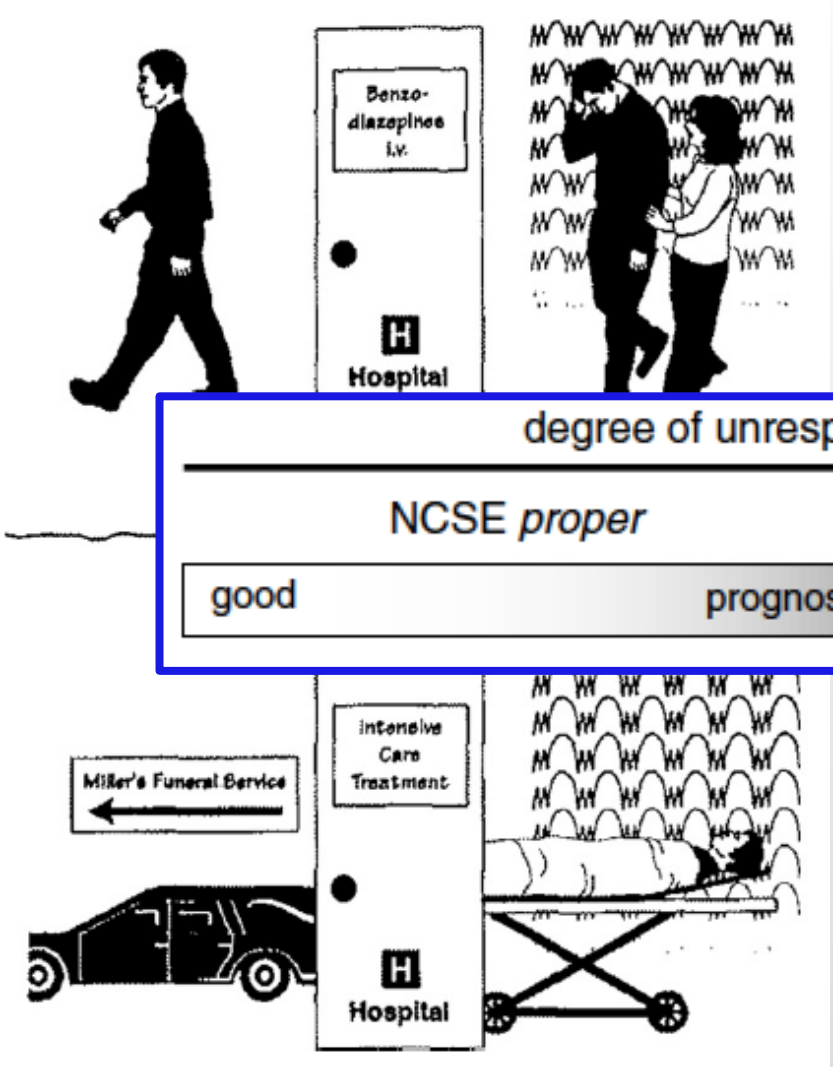

POLISONNO
20 s/pg
7 µV/mm
Passa-alto 0,03 sec
Passa-basso 70 Hz
Notch 50 Hz
Mappa di potenziale
Mappa spettrale
Grafi spettrali
Spettrogramma
Trend EEG
Fp2-F4
F4-C4
C4-P4
P4-O2
Fp1-F3
F3-C3
C3-P3
P3-O1
Fz-Cz
Cz-Pz
Fp2-F8
F8-T4
T4-T6
T6-O2
Fp1-F7
F7-T3
T3-T5
T5-O1
ECG
MK-RF
Anteprima video
Abs:08:32:11,738 - Rel:00:28:14,972 - 42284
1:1
Trasferimento
08:32:21
video 14..
LONGIT..
long_dx_..



NCSE «proper»

NCSE «false»?

Niedermeyer et al 2000; Trinka Leitinger 2015



NCSE «proper»

degree of unresponsiveness

NCSE *proper* — Comatose NSCE

good — prognosis — poor

«false»?

Niedermeyer et al 2000; Trinka Leitinger 2015

Il paziente con stato di assenza

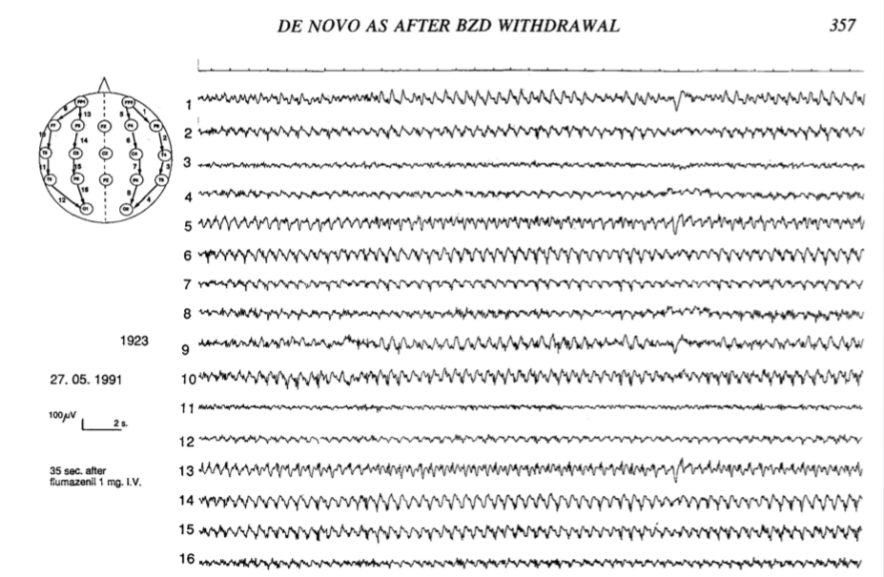
There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
  - Without prominent motor symptoms
    - NCSE with coma (including "subtle" SE)
    - NCSE without coma
      - <u>Generalized</u>
        - Typical absence status
        - Atypical absence status
        - Myoclonic absence status

Lo stato di assenza

- Stato di assenza nel contesto di una IGE
  - *Sospensione farmaci*
  - *Sottodosaggio*
  - *Fattori precipitanti*
- Stato di assenza de novo dell'anziano
  - *Sospensione brusca di sedativi*
  - *Abuso di psicotropi, alcol*
  - *Disionie (ipoNa, ipoCa)*
  - *Facilmente trattabile con BDZ, no AEDs lungo termine*

Lo stato di asse



- Stato di assenza nel contesto di una IGE
  - *Sospensione farmaci*
  - *Sottodosaggio*
  - *Fattori precipitanti*

sedativi

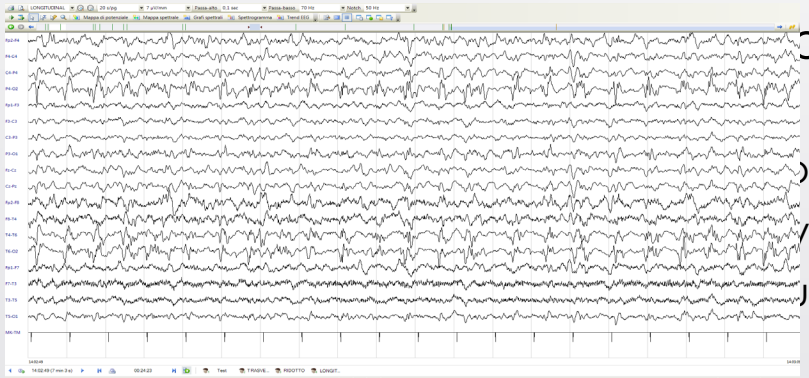
Il paziente con stato afasico

There are two main taxonomic criteria:

- The presence or absence of prominent motor symptoms
  - With prominent motor symptoms
  - Without prominent motor symptoms
    - NCSE with coma (including "subtle" SE)
    - NCSE without coma
      - Generalized
      - Focal
        - Without impairment of conciousness (aura continua)
        - <u>Aphasic status</u>
        - With impaired consciousness

Il paziente con stato afasico

There are two main taxonomic criteria:



of prominent motor

toms

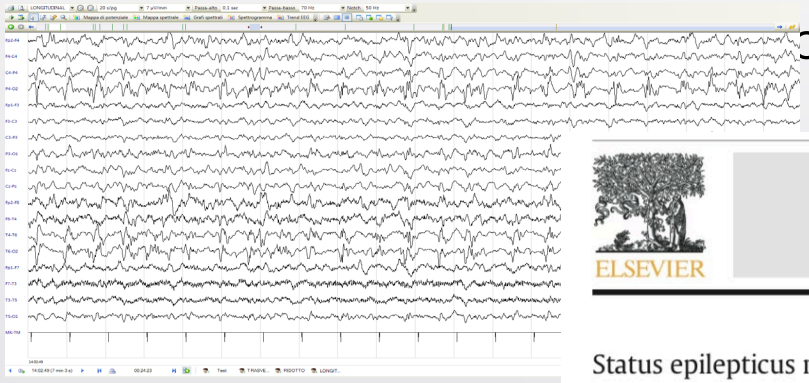
mptoms

uding “subtle” SE)

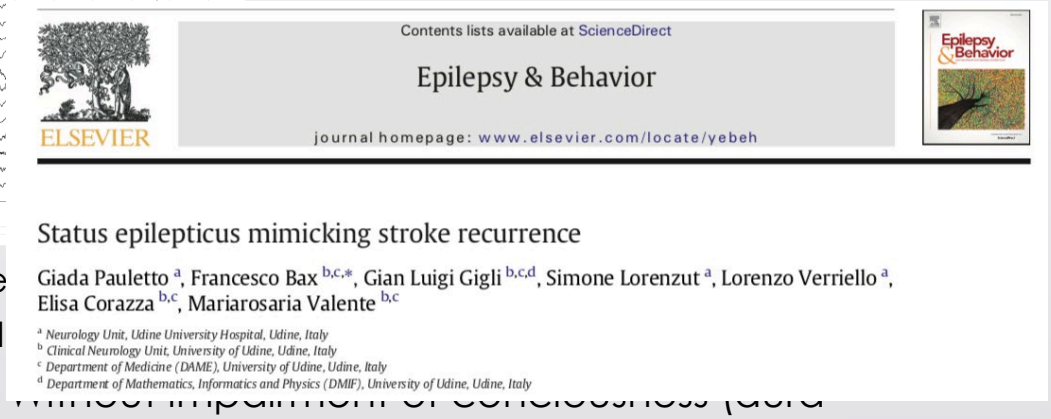
- Generalized
- Focal
  - Without impairment of conciousness (aura continua)
  - <u>Aphasic status</u>
  - With impaired consciousness

Il paziente con stato afasico

There are two main taxonomic criteria:



of prominent motor



Contents lists available at ScienceDirect

Epilepsy & Behavior

journal homepage: www.elsevier.com/locate/yebeh

Status epilepticus mimicking stroke recurrence

Giada Pauletto [a], Francesco Bax [b,c,*], Gian Luigi Gigli [b,c,d], Simone Lorenzut [a], Lorenzo Verriello [a], Elisa Corazza [b,c], Mariarosaria Valente [b,c]

[a] Neurology Unit, Udine University Hospital, Udine, Italy
[b] Clinical Neurology Unit, University of Udine, Udine, Italy
[c] Department of Medicine (DAME), University of Udine, Udine, Italy
[d] Department of Mathematics, Informatics and Physics (DMIF), University of Udine, Udine, Italy

- Gene
- Focal
  - Without impairment of consciousness (data continua)
  - <u>Aphasic status</u>
  - With impaired consciousness

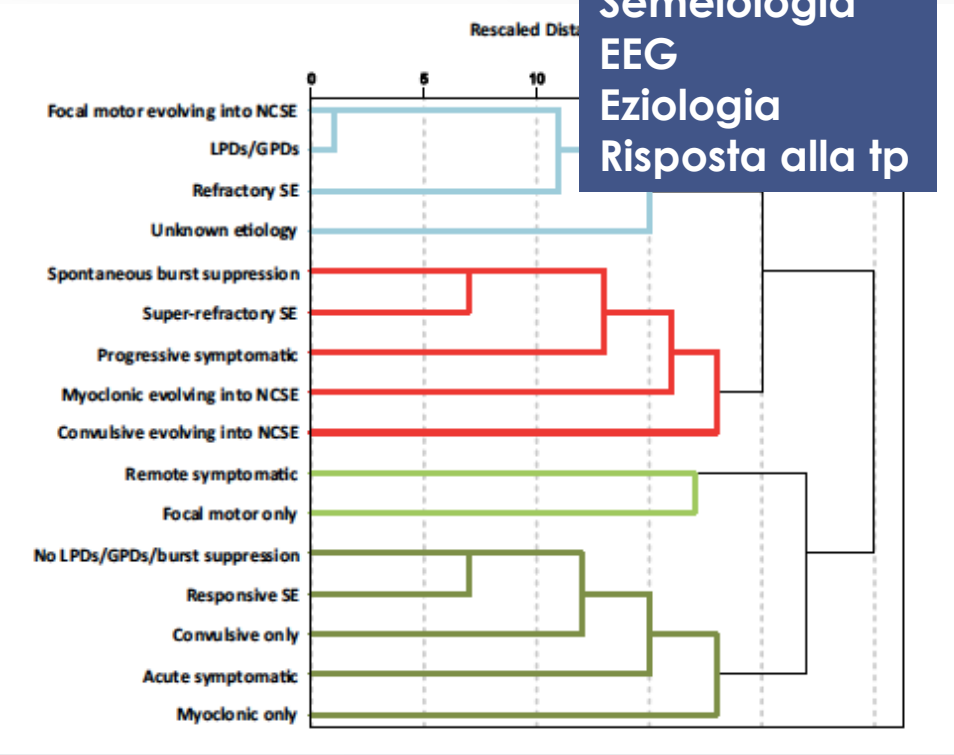
Does it matter?

Received: 23 November 2020 | Accepted: 26 April 2021
DOI: 10.1111/ene.14891
european journal of neurology

ORIGINAL ARTICLE

Status epilepticus with prominent motor symptoms clusters into distinct electroclinical phenotypes

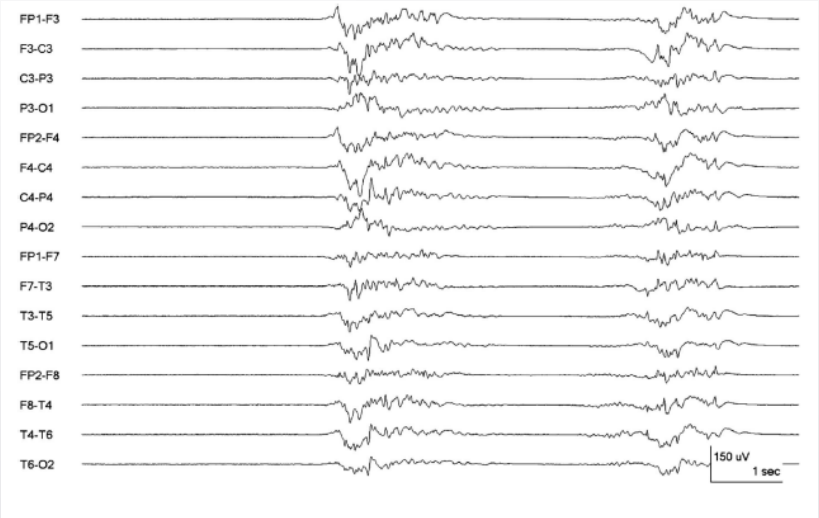
Simona Lattanzi[1] | Giada Giovannini[2,3] | Francesco Brigo[4,5] | Niccolò Orlandi[2,6]
Eugen Trinka[7,8,9] | Stefano Meletti[2,6]



- Convulsive and myoclonic SE → treatment responsive
- SE subtypes evolving into NCSE → refractory and super-refractory
    - Focal motor ev.NCSE → refractory
    - Convulsive and Myoclonic ev.NCSE → super-refractory
- Higher fatality

Leitinger et al 2019

EEG correlates



Refractoriness

Super-refractoriness

higher mortality
poor outcome

Lattanzi 2020, Hirsch et al 2021

GCS
EEG
Eziologia
Risposta alla tp

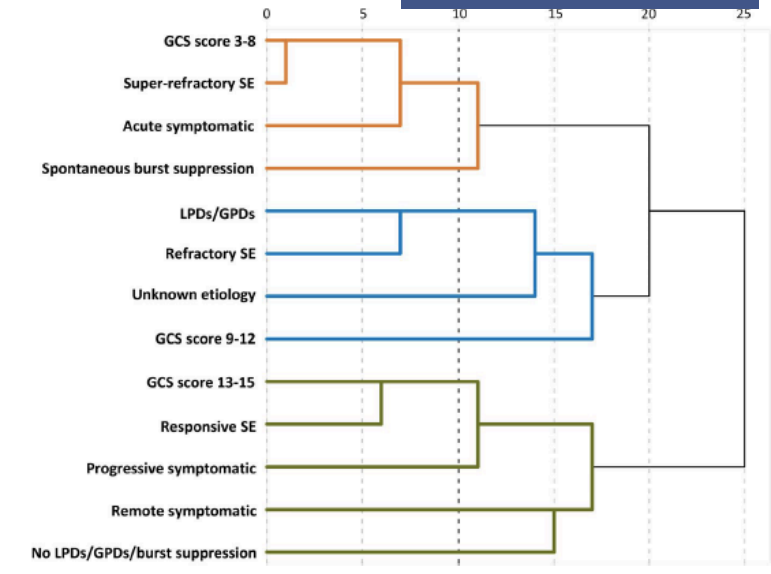
DOI: 10.1111/epi.16999

Epilepsia

BRIEF COMMUNICATION

Clinical phenotypes within nonconvulsive status epilepticus

Simona Lattanzi[1] | Giada Giovannini[2,3] | Francesco Brigo[4,5] | Niccolò Orlandi[2,6] | Eugen Trinka[7,8,9] | Stefano Meletti[2,6]



1. Coma – BS spontaneo – acute symptomatic – Super-refractory
2. Coma – PDs – unknown etiol. – refractory
3. Alert – no PD or BS - Remote/progressive symptomatic – responsive to therapy

Scale prognostiche

- Status Epilepticus Severity Score (STESS), mSTESS
- EMSE
- Encephalitis Nonconvulsive Status Epilepticus Diazepam Resistance Imaging Tracheal Intubation (END-IT) score

→ Mortality and functional outcome

Response to treatment?

STESS
Status Epilepticus Severity Score

Rossetti et al 2006

	Features	STESS
Consciousness	Alert or somnolent/confused	0
	Stuporous or comatose	1
Worst seizure type	Simple-partial, complex-partial, absence, myoclonic*	0
	Generalized-convulsive	1
	Nonconvulsive status epilepticus in coma	2
Age	< 65 years	0
	≥ 65 years	2
History of previous seizures	Yes	0
	No or unknown	1
Total		0–6

* complicating idiopathic generalized epilepsy

- 0-2 outcome favorevole alla sopravvivenza
- ≥ 3 sfavorevole

Status Epilepticus Severity Score (STESS)

A tool to orient early treatment strategy ?

Nessuna differenza sopravvivenza in TC/no

STESS
Status Epilepticu

Rossetti et al 2006

Independent External Validation of the Status Epilepticus Severity Score

Raoul Sutter, MD[1,2,3,4]; Peter W. Kaplan, MBBS, FRCP[4]; Stephan Rüegg, MD[3]

	Features	STESS
Consciousness	Alert or somnolent/confused	0
	Stuporous or comatose	1
Worst seizure type	Simple-partial, complex-partial, absence, myoclonic*	0
	Generalized-convulsive	1
	Nonconvulsive status epilepticus in coma	2
Age	< 65 years	0
	≥ 65 years	2
History of previous seizures	Yes	0
	No or unknown	1
Total		0–6

* complicating idiopathic generalized epilepsy

- Pz più gravi
- Cut off differente ≥ 4

- 0-2 outcome favorevole alla sopravvivenza
- ≥ 3 sfavorevole

Status Epilepticus Severity Score (STESS)

A tool to orient early treatment strategy ?

Nessuna differenza sopravvivenza in TC/no

STESS
Status Epilepticu

Rossetti et al 2006

Independent External Validation of the Status Epilepticus Severity Score

Raoul Sutter, MD[1,2,3,4]; Peter W. Kaplan, MBBS, FRCP[4]; Stephan Rüegg, MD[3]

	Features	STESS
Consciousness	Alert or somnolent/confused	0
	Stuporous or comatose	1
Worst seizure type	Simple-partial, complex-partial, absence, myoclonic*	0
	Generalized-convulsive	1
	Nonconvulsive status epilepticus in coma	2
Age	< 65 years	0
	≥ 65 years	2
History of previous seizures	Yes	0
	No or unknown	1
Total		0–6

* complicating idiopathic generalized epilepsy

- Pz più gravi
- Cut off differente ≥ 4

Funziona meglio con pts meno gravi (che sopraviveranno)

- 0-2 outcome favorevole alla sopravvivenza
- ≥ 3 sfavorevole

Status Epilepticus Severity Score (STESS)

A tool to orient early treatment strategy ?

Nessuna differenza sopravvivenza in TC/no

Epidemiology-based Mortality score in Status Epilepticus (EMSE)

Leitinger et al 2015

AETIOLOGY: score one stratum

aetiology E (reference: 1, 9)	EMSE-points
CNS-anomalies	2
drug reduction/ withdrawal, poor compliance	2
multiple sclerosis	5
remote cerebrovascular disease, brain injury	7
hydrocephalus	8
alcohol abuse	10
drug overdose	11
head trauma	12
cryptogenic	12
brain tumor	16
metabolic: sodium imbalance	17
metabolic disorders	22
acute cerebrovascular disease	26
CNS-infection: acute	33
anoxia	65

AGE: score one stratum

age A (reference: 11)	EMSE-points
21-30	1
31-40	2
41-50	3
51-60	5
61-70	7
71-80	8
>80	10

EEG: score only worst stratum

EEG E (reference 13, 14)	EMSE-points
burst suppression (spontaneous)	60
ASIDs	40
LPDs	40
GPDs	40
no LPDs, GPDs or ASIDs	0

COMORBIDITY: score each disease

comorbidity C (reference: 16)	EMSE-points
myocardial infarction, congestive heart failure, peripheral vascular disease, cerebrovascular disease, dementia, chronic pulmonary disease, connective tissue disease, ulcer disease, mild liver disease, diabetes	10
hemiplegia, moderate or severe renal disease, diabetes with end organ damage, any tumor including leukemia/ lymphoma	20
moderate or severe liver disease	30
metastatic solid tumor, AIDS	60

__
+ __
+ __
+ __
= __

__
+ __
+ __
+ __

sum score = __

- Più «Mortality risk point» → mortalità più elevata
- Sopra 64 punti→ elevato rischio di morte

Seizure 46 (2017) 31–37

Contents lists available at ScienceDirect

Seizure

journal homepage: www.elsevier.com/locate/yseiz

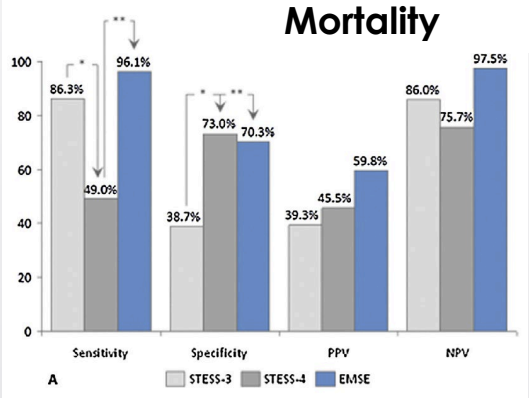
Mortality, morbidity and refractoriness prediction in status epilepticus: Comparison of STESS and EMSE scores

Giada Giovannini[a,b], Giulia Monti[a,b], Manuela Tondelli[a], Andrea Marudi[c], Franco Valzania[b], Markus Leitinger[d,e], Eugen Trinka[d,e,f], Stefano Meletti[a,b,*]

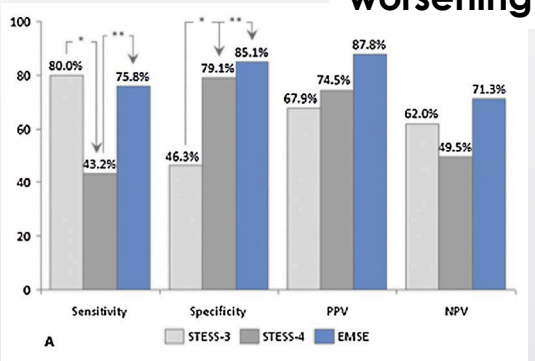
Compare:

- STESS-3
- STESS-4
- EMSE-64

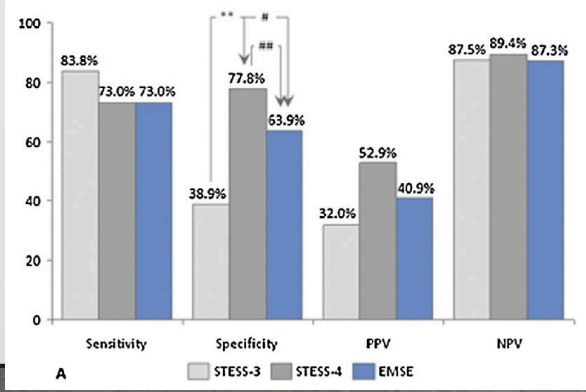
Mortality



Clinical worsening



Treatment response



- Globalmente EMSE>STESS
- Pazienti meno gravi
- Insufficienti nel prevedere refrattarietà al trattamento

END-it score

Gao et al. Critical Care (2016) 20:46

Table 4 Point allocation for the END-IT score based on regression coefficients

Relative factor	Categories	Points
Encephalitis	Yes	1
	No	0
NCSE	Yes	1
	No	0
Diazepam resistance	Yes	1
	No	0
Image	bilateral lesions/diffuse cerebral edema	2
	unilateral lesions	1
	no responsible lesion	0
Tracheal intubation	Yes	1
	No	0

NCSE nonconvulsive status epilepticus

- Total 0-6
  - Punteggio più alto → outcome peggiore(mRS)
- Migliore performance di STESS e EMSE…
- Non paragonabile come popolazione ai nostri pazienti (età media 25 aa! Encefaliti 36%)

Conclusioni

- Corretto inquadramento fenotipo elettroclinico
  - Correlazioni

  Prognosi precoce («severità intrinseca»)
  - Mortalità e outcome
  - Risposta alla terapia

    - Aggressività della terapia

- Verso un sistema di classificazione multidimensionale?

Technician

Alessia Segatti
Luca Alessandrini
Elisa Concon
Davide Orlando
Federica Basaldella
Andrea Badari

Neurology

Tiziano Zanoni
Elena Greco

Neuro-ICU

Marilena Casartelli
Camilla Allegri
Paolo Zanatta

Thanks

monica.ferlisi@aovr.veneto.it

Monica Ferlisi
Unit of Neurology A, Neuroscience Department
AOUI Verona