



Il triage nelle PTdC

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APSS Trento

2019 - Il triage a 5 codici



Ministero della Salute

DIREZIONE GENERALE DELLA PROGRAMMAZIONE SANITARIA

*LINEE DI INDIRIZZO NAZIONALI
SUL TRIAGE INTRAOSPEDALIERO*

2019 - Il triage a 5 codici

OBIETTIVI

- Identificare immediatamente condizioni pericolose per la vita
- Definire un codice di priorità
- Attivare le risorse necessarie per gestione del paziente

MODELLO

- Triage Globale

METODO

- Valutazione immediata (c.d. sulla porta)
- Valutazione soggettiva e oggettiva
- Decisione di triage
- Rivalutazione

2019 - Il triage a 5 codici

| TRIAGE: nuova codifica di priorità e tempo massimo di attesa | | | | |
|--|-----------|---------------------|--|--|
| Codice | | Denominazione | Definizione | Tempo Massimo di attesa per l'accesso alle aree di trattamento |
| Numero | Colore | | | |
| 1 | ROSSO | EMERGENZA | INTERRUZIONE O COMPROMISSIONE DI UNA O PIÙ FUNZIONI VITALI | ACCESSO IMMEDIATO |
| 2 | ARANCIONE | URGENZA | RISCHIO DI COMPROMISSIONE DELLE FUNZIONI VITALI. CONDIZIONE CON RISCHIO EVOLUTIVO O DOLORE SEVERO | ACCESSO ENTRO 15 MINUTI |
| 3 | AZZURRO | URGENZA DIFFERIBILE | CONDIZIONE STABILE SENZA RISCHIO EVOLUTIVO CON SOFFERENZA E RICADUTA SULLO STATO GENERALE CHE SOLITAMENTE RICHIEDE PRESTAZIONI COMPLESSE | ACCESSO ENTRO 60 MINUTI |
| 4 | VERDE | URGENZA MINORE | CONDIZIONE STABILE SENZA RISCHIO EVOLUTIVO CHE SOLITAMENTE RICHIEDE PRESTAZIONI DIAGNOSTICO TERAPEUTICHE SEMPLICI MONO-SPECIALISTICHE | ACCESSO ENTRO 120 MINUTI |
| 5 | BIANCO | NON URGENZA | PROBLEMA NON URGENTE O DI MINIMA RILEVANZA CLINICA | ACCESSO ENTRO 240 MINUTI |

Ruolo delle flowchart

Manuale regionale Triage intra-ospedaliero modello Lazio a cinque codici

| SINCOPE | | | | | |
|------------------|-----------------------|---|--|---|---------|
| CODICE TRIAGE | 1 | 2 | 3 | 4 | 5 |
| Parametri Vitali | Da codice 1 | Da codice 2 | Da codice 3 | Da codice 4 | Normali |
| | messe, hock, morragia | Presincope con segni associati. Sincopi-presincopi recidivanti nelle ultime 24 ore. Segni neurologici ≥ 4,5h. | Sincopa pregressa entro le 72 h Presincope anamnestica senza segni associati | Sincopa anamnestica (>72 h) Assenza di criteri per l'attribuzione di codice superiore | |

3.2.6 Sincope / Pre - Sincope

| CODICE | SINTOMO |
|--------|---|
| 1 | ALTERAZIONE DI MIMICA FACCIALE / MOTILITÀ ARTI / DISTURBI DEL LINGUAGGIO ENTRO LE 5 ORE |
| 2 | CONVULSIONI REGREDITE |
| 2 | DOLORE TORACICO |
| 2 | CARDIOPALMO O POLSO ARITMICO |
| 2 | DISTURBI NEUROLOGICI DOPO LE 5 ORE O REGREDI |
| 2 | EMORRAGIA |
| 2 | DISPNEA |
| 2 | CEFALEA |
| 2 | FATTORI DI RISCHIO PER EMBOLIA POLMONARE |
| 2 | INTOSSICAZIONE |
| 2 | CARDIOPATIA |
| 2 | EPATOPATIA CRONICA / DIABETE |
| 2 | DOLORE ADDOMINALE + DONNA IN ETÀ FERTILE |
| 2 | DOLORE ADDOMINALE + IPERTENSIONE ARTERIOSA |
| 2 | DOLORE ADDOMINALE + STORIA DI ANEURISMA AO |
| 3 | EVENTO ENTRO 24 ORE SENZA CRITERI DI PRIORITÀ |
| 4 | EVENTO OLTRE 24 ORE SENZA CRITERI DI PRIORITÀ |

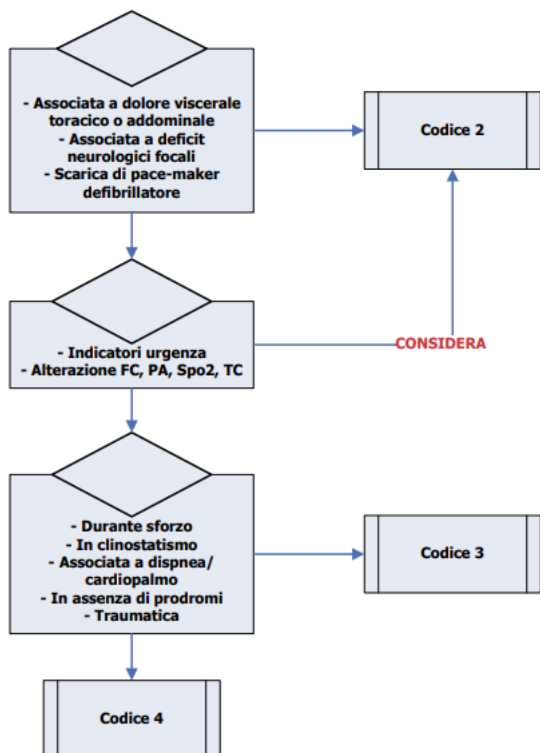
Note

Usa la scheda quando la sintomatologia è già risolta. La scheda con In assenza di priorità, la perdita di conoscenza, è da ritenersi una urgenza e viene in tal caso identificata come codice 3.

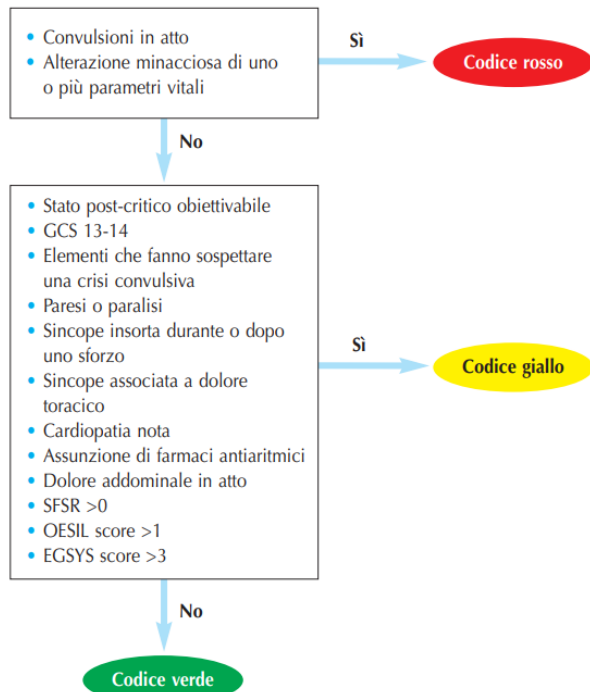
Alt

SINCOPE

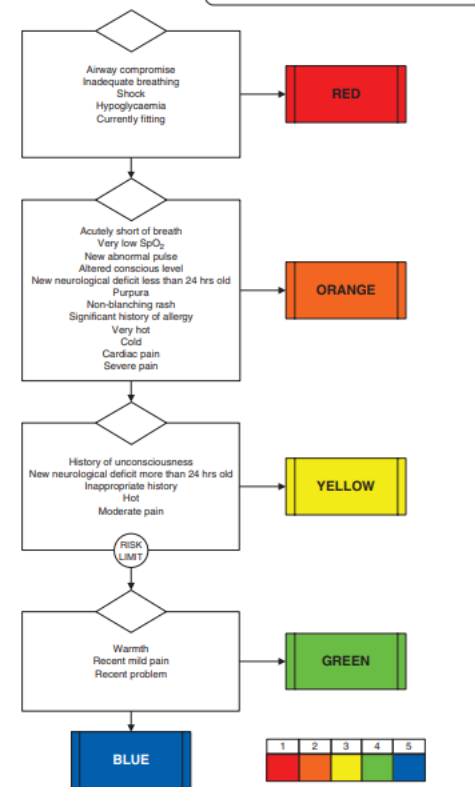
Flow-chart



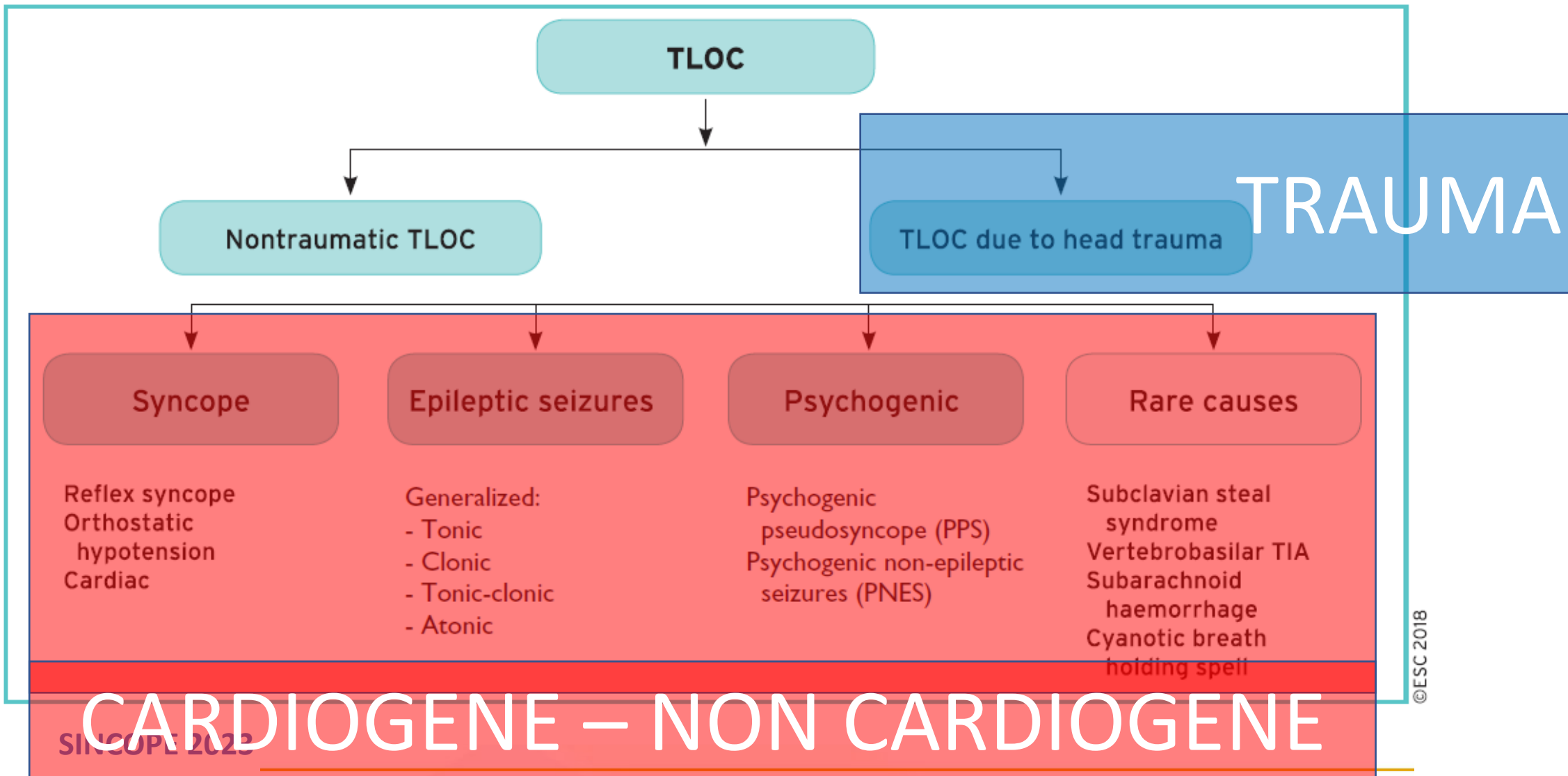
PERDITA DI COSCIENZA TRANSITORIA



Collapsed adult

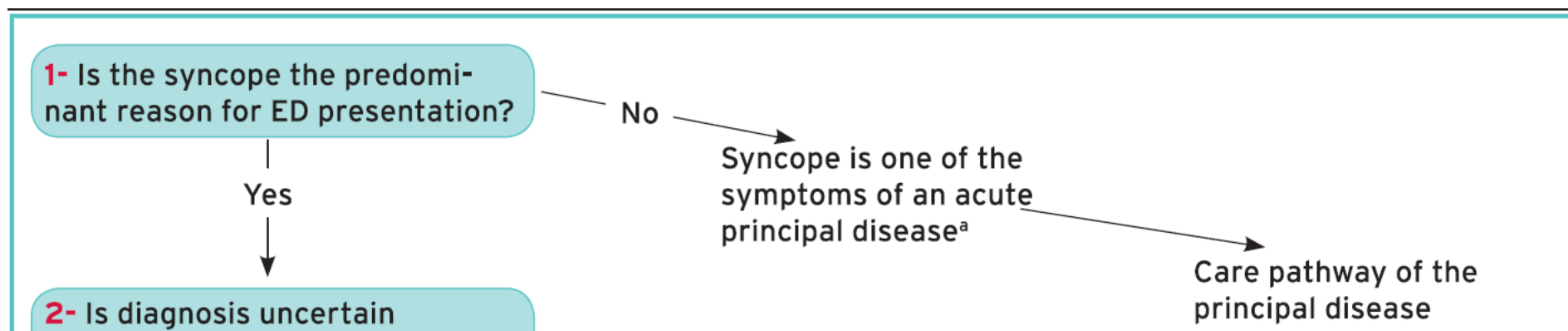


TLOC – Considerazioni necessarie



TLoC - Sintomo principale o associato?

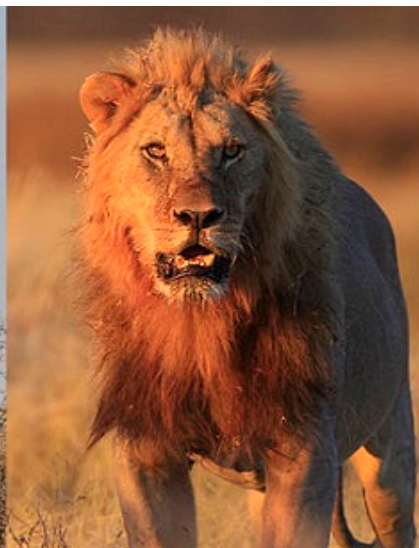
Identificazione del sintomo principale : INDISPENSABILE DEFINIRE il MOTIVO vero per il quale stiamo valutando il paziente



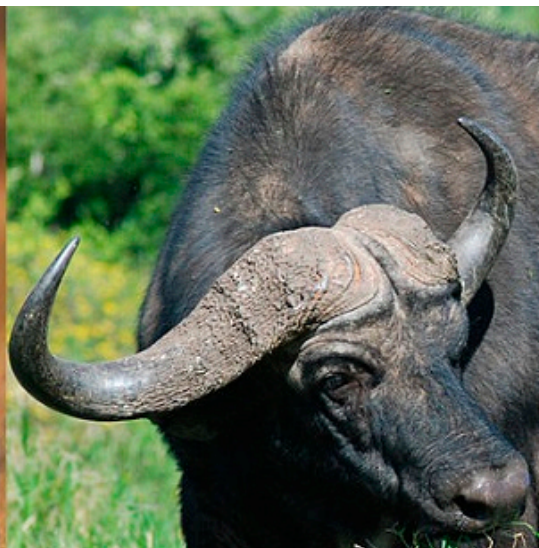
I BIG 5



AAA



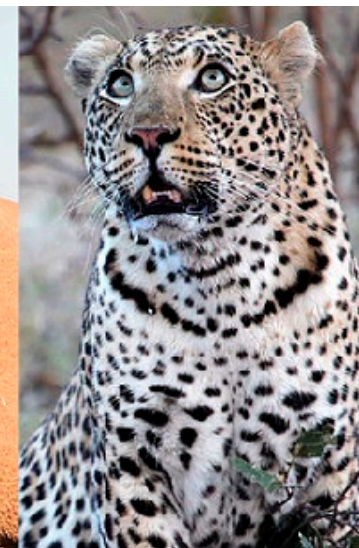
EP



EMORRAGIA



SCA



ESA

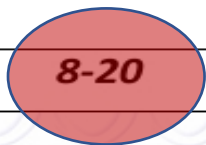
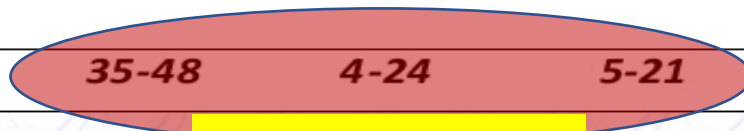
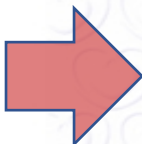
PERCORSO PATOLOGIA PRINCIPALE

TLoC non traumatiche

Epidemiology - Frequency of the causes of syncope according to the settings (1)



| Setting | Source | Reflex (%) | Orthostatic hypotension (%) | Cardiac (%) | Non syncopal T-LOCs (%) | Un-explained (%) |
|-----------------------------|---------------------------|--------------|-----------------------------|-------------|-------------------------|------------------|
| General population | <i>Framingham studies</i> | 21 | 9.4 | 9.5 | 9 | 37 |
| Emergency department | <i>Ammirati</i> | 35 | 6 | 21 | 20 | 17 |
| | <i>Sarasin</i> | 38 | 24 | 11 | 8 | 19 |
| | <i>Blanc</i> | 48 | 4 | 10 | 13 | 24 |
| | <i>Disertori</i> | 45 | 6 | 11 | 17 | 19 |
| | <i>Olde Nordkamp</i> | 39 | 5 | 5 | 17 | 33 |
| | Range | 35-48 | 4-24 | 5-21 | 8-20 | 17-33 |



> 50%

TLoC e DEA

| | |
|-------------------|---|
| Accessi al PS-DEA | 1 - 3% |
| Ospedalizzazioni | > 50% delle sincopi ~ 2-4% di tutti i ricoveri |
| Degenza media | ~ 7 giorni |
| Diagnosi | ~ 50% |

OESIL Study (G Ital Cardiol 1999; 29:533-9) EGSYS 1 (Europace 2003; 5:283-91) Del Rosso A (Ital Heart J Supp 2000; 1:772-6) Sun BC, Emond JA, Camargo CA Jr. Characteristics and admission patterns of patients presenting with syncope to U.S. emergency departments, 1992-2000. Acad Emerg Med 2004;11:1029-34

Obiettivi del triage

- VALUTAZIONE RAPIDA 5'
- DEFINIRE PRIORITA' (non diagnosi)
- SICUREZZA
- SENSIBILITA' – RULE OUT



It is recommended that patients with high-risk features receive an early intensive and prompt evaluation in a syncope unit or in an ED observation unit (if available), or are hospitalized. ^{26,27,35,36,44–46,50,55–57,59,60,70–76}

I

B

Performance valutazioni triage



ESC

European Society
of CardiologyEuropean Journal of Cardiovascular Nursing (2022) 21, 280–286
doi:10.1093/eurjcn/zvab063

ORIGINAL ARTICLE

Nurse triage accuracy in the evaluation of syncope according to European Society of Cardiology guidelines

Arian Zaboli ^{1*}, Dietmar Ausserhofer^{2,3}, Serena Sibilio¹, Rupert Paulmichl⁴, Elia Toccolini¹, Chiara Losi⁴, Alberto Giudiceandrea¹, Norbert Pfeifer¹, Francesco Brigo⁵, and Gianni Turcato¹

The results of the study suggest that the **accuracy of nurse triage in suspecting cardiac syncope is unsatisfactory.** Despite a good specificity (close to 90%), the **sensitivity of less than 50%** suggests that nurse triage is not able to achieve sufficient safety and may require implementation of additional tools after the initial triage assessment.

SINCOPE 2023

Original article

Predictive accuracy of triage nurses evaluation in risk stratification of syncope in the emergency department

M Bonzi,¹ E M Fiorelli,¹ L Angaroni,¹ L Furlan,¹ M Solbiati,¹ C Colombo,¹ F Dipaola,² N Montano,^{1,3} R Furlan,^{2,3} G Costantino¹

The results of the present study suggested that **nursing triage was characterised by poor Sn and Sp in identifying syncope patients at high risk of rapid clinical deterioration.** The OESIL risk score might be used as a tool to help triage due to simplicity of use. The use of the OESIL risk score without proper clinical judgement could lead to an excessive rate of high-risk characterisation.

Triage evidence based

- Valutazione EVENTO
- Valutazione PAZIENTE



Presincope? (= Sincope)

Cadute non spiegate? (= Sincope)

Traumi?

Errori di fissazione su un sintomo?

PESARE SEMPRE IL RISCHIO EVOLUTIVO

Table 6 High-risk features (that suggest a serious condition) and low-risk features (that suggest a benign condition) in patients with syncope at initial evaluation in the emergency department

| SYNCOPEL EVENT | |
|---|--|
| Low-risk | |
| <ul style="list-style-type: none"> • Associated with prodrome typical of reflex syncope (e.g. light-headedness, feeling of warmth, sweating, nausea, vomiting)^{36,49} • After sudden unexpected unpleasant sight, sound, smell, or pain^{36,49,50} • After prolonged standing or crowded, hot places³⁶ • During a meal or postprandial⁵¹ • Triggered by cough, defaecation, or micturition⁵² • With head rotation or pressure on carotid sinus (e.g. tumour, shaving, tight collars)⁵³ • Standing from supine/sitting position⁵⁴ | |
| High-risk | |
| Major | |
| <ul style="list-style-type: none"> • New onset of chest discomfort, breathlessness, abdominal pain, or headache^{26, 44, 55} • Syncope during exertion or when supine³⁶ • Sudden onset palpitation immediately followed by syncope³⁶ | |
| Minor (high-risk only if associated with structural heart disease or abnormal ECG): | |
| <ul style="list-style-type: none"> • No warning symptoms or short (<10 s) prodrome^{36, 38, 49, 56} • Family history of SCD at young age⁵⁷ • Syncope in the sitting position⁵⁴ | |
| PAST MEDICAL HISTORY | |
| Low-risk | |
| <ul style="list-style-type: none"> • Long history (years) of recurrent syncope with low-risk features with the same characteristics of the current episode⁵⁸ • Absence of structural heart disease^{27, 58} | |
| High-risk | |
| Major | |
| <ul style="list-style-type: none"> • Severe structural or coronary artery disease (heart failure, low LVEF or previous myocardial infarction)^{26, 27, 35, 55, 59} | |
| PHYSICAL EXAMINATION | |
| Low-risk | |
| <ul style="list-style-type: none"> • Normal examination | |

Flowchart di valutazione

- Alterazione critica parametri vitali (PAS < 90 mmHg e/o FC < 40 > 130 bpm
 - Glicemia < 50 mg/dl
 - Crisi generalizzata in atto

1

- PDC associata o preceduta da:
 - Cardiopalmo improvviso, o
 - dolore toracico, o
 - dispnea, o
 - dolore addominale, o
 - cefalea
- PDC avvenuta in posizione supina o durante esercizio
- Stato post critico o confusionale in atto
- Sospetta esposizione a monossido di carbonio



Azienda Provinciale  per i Servizi Sanitari
Provincia Autonoma di Trento

2

Flowchart di valutazione

- PDC avvenuta in posizione seduta
- PDC in assenza di prodromi o periodo prodromico molto breve (< 10 sec)
- Cardiopatìa strutturale o patologia coronarica nota
- Anamnesi familiare di morte improvvisa in giovane età (< 55 anni uomo e < 50 anni donna)
- Fattori di rischio per embolia polmonare (recente immobilizzazione di un arto; presenza di apparecchio gessato; edema monolaterale di un polpaccio; recente intervento chirurgico; neoplasie)
- Riferito risveglio con stato confusionale

- Parametri vitali nella norma
- PDC
 - con prodromi
 - dopo emozioni spiacevoli, forte dolore
 - durante il pasto o post-prandiale
 - innescata da tosse, defecazione o minzione
 - in luoghi affollati e/o caldi
 - dopo rotazione del capo o pressione sul seno carotideo
 - dopo passaggi posturali (clino – ortostatismo)
 - successiva a prolungata stazione eretta

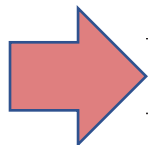
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4

Riflessioni per il futuro

- Score di rischio?
- ECG al triage?



Risk stratification scores may be considered for risk stratification in the ED.^{78–86}

IIb

B

Additional advice and clinical perspectives

- In the ED, presyncope should be managed with the same accuracy as syncope as it carries the same prognosis.^{66–68}
- Diagnostic radiology and laboratory tests such as chest X-ray, brain computed tomography, routine blood haematology, biochemistry, and D-dimer and cardiac markers have a low diagnostic yield, impact on risk stratification of patients with syncope, and should not routinely be used unless specifically suggested by clinical evaluation.
- Around 10% of patients with syncope in the ED will suffer from a serious outcome within 7–30 days of their visit, with just under half occurring after their stay in the ED (see *Supplementary Data Table 4*). It is crucial to identify these high-risk patients to ensure early, rapid, and intensive investigation.
- As syncope units are both effective and efficient, this early, rapid, and intensive investigation can be performed on an outpatient basis (either in a syncope unit or an ED observation unit) in most cases. Only patients with a risk of a short-term serious outcome should be considered for hospital admission.
- To reduce inappropriate admissions, patients who have a cardiac device and syncope should undergo prompt device interrogation.
- Risk stratification scores perform no better than good clinical judgement and should not be used alone to perform risk stratification in the ED.

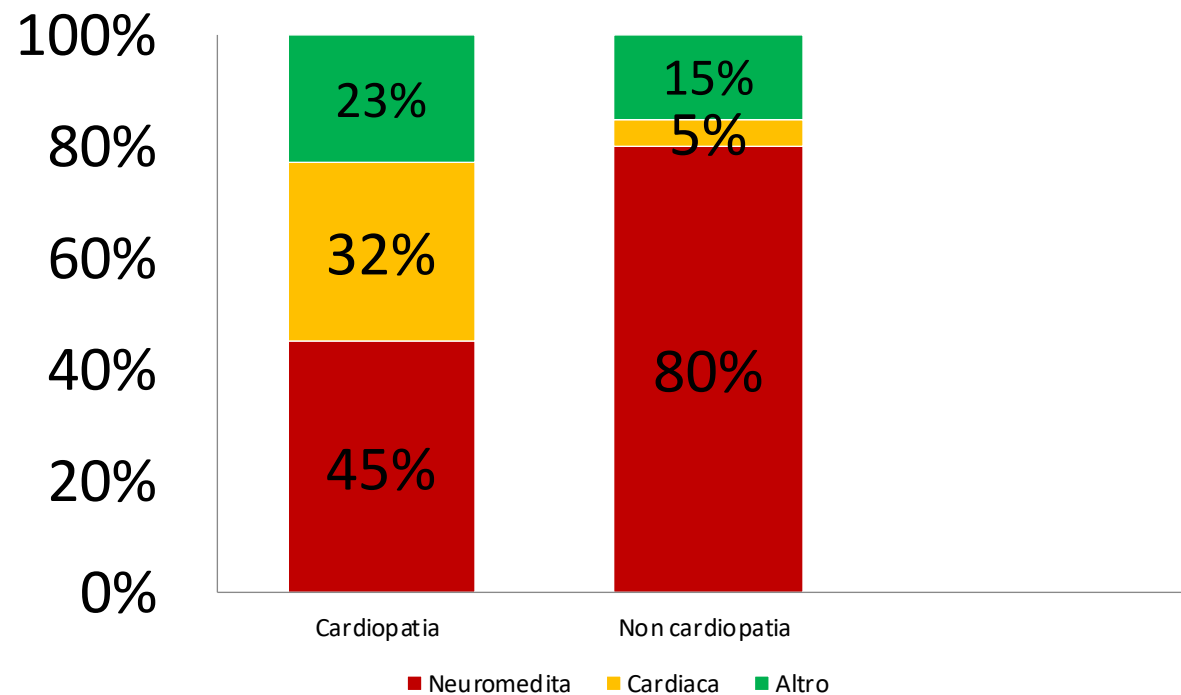
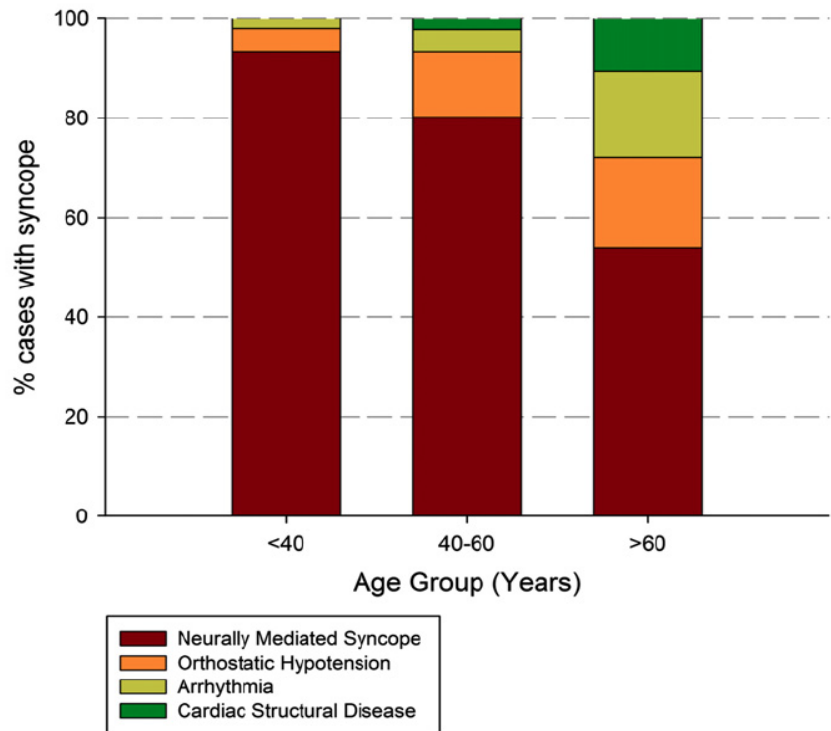
Take home messages



- Triage definisce la priorità
- Implementazione linee guida ESC 2018
- Identificazione sintomo principale
- Valutazione globale (BIG 5, cadute, traumi)
- Pesare sempre il rischio evolutivo

FINE PRESENTAZIONE

Sincope e DEA



D'Ascenzo F et al. Incidence, etiology and predictors of adverse outcomes in 43,315 patients presenting to the Emergency Department with syncope: an international meta-analysis. *Int J Cardiol.* 2013 Jul 15;167(1):57-62.

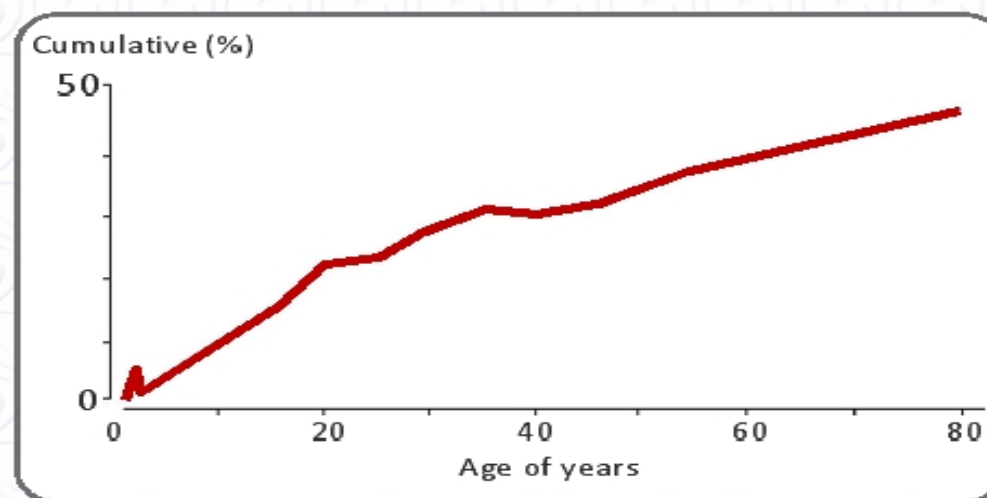
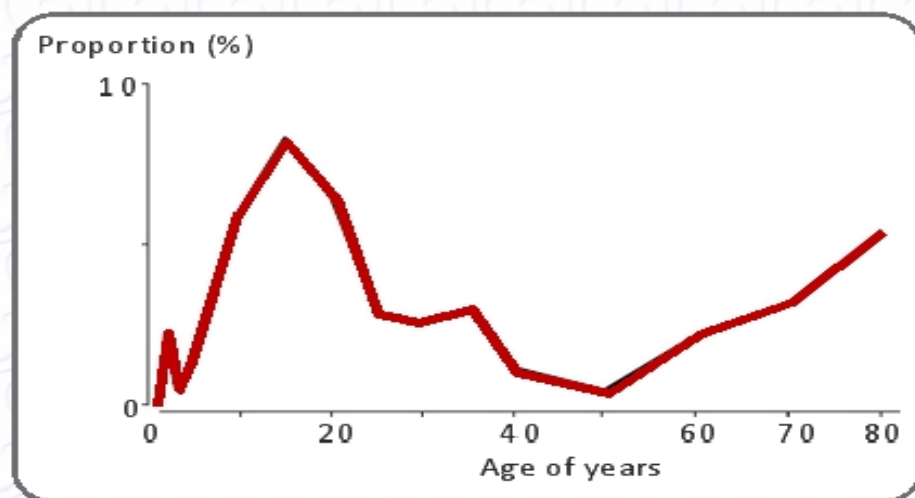
FINE PRESENTAZIONE

FOLLOW
YOUR
DREAMS

CANCELLED



Age of first faint



Epidemiology - Frequency of the causes of syncope according to the settings (1)

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SINCOPE Merano 2022

The results of the study suggest that the accuracy of nurse triage in suspecting cardiac syncope is unsatisfactory. Despite a good specificity (close to 90%), the sensitivity of less than 50% suggests that nurse triage is not able to achieve sufficient safety and may require implementation of additional tools after the initial triage assessment.

A possible application of the findings of the current study in clinical practice could be to associate a subsequent standardized nursing assessment beyond triage that could perhaps also take advantage of some of the tools now widely available in clinical practice, such as the Valsalva manoeuvre or electrocardiogram, to improve the limited sensitivity reported in the results.

Another important finding for clinical practice highlighted by the current study is the need to keep triage systems up-to-date with the latest guidelines, especially in complex symptoms such as syncopal TLOC, to enable triage systems to improve their performance.

The effectiveness of nurse triage in prioritizing patients with syncopal TLOC appears to be suboptimal, showing low sensitivity for possible underlying cardiac conditions. The moderate specificity, close to 90%, suggests that subsequent standardized nursing assessments could be included to improve the sensitivity of nurse triage. As suggested by some authors, the introduction of tools such as clinical scores or electrocardiographic study should be evaluated in prospective cohorts to refine the risk stratification of patients with syncopal TLOC at triage.