Ricovero o dimissione?

Giorgio Costantino
Fondazione IRCCS Ca' Granda
Ospedale Maggiore Policlinico
Milano
giorgio.costantino@policlinico.mi.it

L’insegnante

L’insegnante

- Professoressa di matematica, 62 anni, episodio di perdita di coscienza senza prodromi mentre sale le scale. Nella caduta trauma contusivo al viso.
- Nulla di rilevante in anamnesi, nessuna terapia, ECG normale.

Come gestireste questo paziente?

Tassi di ricovero nel mondo

- Canada: 12%
- US: fino al 89%
- UK: 50% circa
- Italia: circa il 35%

A cosa serve ricoverare?

Eventi avversi nella sincope

Table 2 Pooled incidence of mortality, syncope relapse, major events, and overall serious outcomes at different times

Outcome	Time	Number of studies	Number of patients	Number of events	Pooled rate (%)	95% CI (%)	I^2 (%)[b]	Heterogeneity P-value[c]
Mortality	10 days	3 (S2; S4; S5)	1472	10	0.7	0.4–1.3	0	0.8015
	30 days	4 (S9; S15; S18; S24)	3214	50	1.6	1.2–2.1	0	0.6851
	6 months	4 (S13; S15; S17; S20)	1923	75	3.7	2.5–5.4	29.2	0.2372
	1 year	9 (S1; S3; S5–S8; S14; S15; S19)	4879	387	8.4	6.7–10.2	77.2	<0.0001
	1.5 years	4 (S10; S16; S22; S24)	1254	111	8.9	7.4–10.6	0	0.8345
	2 years	2 (S21; S25)	164	18	11.0	7–16.8	0	0.7836
Syncope recurrence	30 days	1 (S24)	380	1	0.3	0–1.8[a]	0	–
	6 months	2 (S13; S20)	350	18	5.2	3.3–8.2	0	0.3915
	1 year	2 (S7; S22)	797	72	9.0	7.2–11.3	0	0.5987
	1.5 years	4 (S10; S16; S22; S24)	1254	202	16.1	14.2–18.3	0	0.9582
	2 years	2 (S21; S25)	164	36	22.0	16.3–29.1	0	0.4727
Morbidity	10 days	2 (S4; S5)	759	45	6.9	3.7–12.6	67.3	0.0804
	30 days	3 (S9; S12; S18)	1807	179	11.4	5.7–21.5	96.6	<0.0001
	6 months	1 (S17)	99	6	6.1	2.7–12.8[a]	0	–
	1 year	4[d] (S5; S14; S19)	2336	262	11.3	5.8–20.9	96.3	<0.0001
	1.5 years	2 (S10; S16)	263	58	25.2	11–47.8	90.5	0.0012
Overall serious outcomes	10 days	7 (S2; S4; S5; S11; S17; S19; S23)	4040	357	9.1	6.6–12.5	88.5	<0.0001
	30 days	3 (S9; S17; S18)	1459	155	11.6	4.5–26.4	96.4	<0.0001
	6 months	2 (S17; S19)	1142	118	10.3	8.7–12.2	0	0.79012
	1 year	4 (S1; S5; S14; S19)	2244	363	17.3	8.6–31.6	97.6	<0.0001
	1.5 years	2 (S10; S16)	263	79	32.9	19.3–50.2	84.1	0.01227

Solbiati, Europace 2015

Quali eventi avversi?

Table 4 Major Therapeutic Procedures and Early Readmission Within 10 Days From Syncope

	Patients, n	Clinical Conditions Leading to Major Therapeutic Procedures
PM	21	Complete AV block, Mobitz type 2, second-degree AV block, sustained bradycardia, carotid sinus syndrome
ICD	1	Malignant arrhythmias with severe left ventricular disfunction
CPR	1	Myocardial infarction with respiratory failure
Intensive care unit admission	5	Pulmonary edema, acute respiratory failure, subarachnoid hemorrhage
Intensive care unit admission + ICD	1	Malignant arrhythmias with severe left ventricular disfunction
Antiarrhythmic therapy	3	High ventricular rate atrial flutter or atrial fibrillation with heart failure
Early readmission for syncope recurrence	4	
Total	36	

AV = atrioventricular; CPR = cardiopulmonary resuscitation; ICD = implantable cardioverter-defibrillator; PM = pacemaker implant.

JAMA Internal Medicine
Formerly *Archives of Internal Medicine*

Research Letter | June 2015

LESS IS MORE

Unnecessary Hospitalization and Related Harm for Patients With Low-Risk Syncope

Jenna VanLiere Canzoniero, MD, MS[1]; Elham Afshar, MD[2]; Helene Hedian, MD[2]; Christina Koch, MD[2]; Daniel J. Morgan, MD, MS[3,4]

72 of the admissions (34%) were for low-risk (SFSR score, 0). These patients has a mean 1.73-day length of stay and 10.8 tests. Clinical data are reported in (Table 1). Eleven adverse events were identified in 9 admissions for low-risk syncope (13% [95% CI, 0.06-0.23]). Four of these adverse events were classified as serious and included delirium, transfusion error, hypoglycemia, and fall. Other adverse events included missed medication errors and complications from intravenous and urinary catheter placement

Perché si ricovera nella sincope?

- Sincope epifenomeno di patologie gravi o di fragilità?

Il ricovero nella sincope serve?

Table 5 Risk Factors for Severe Short-Term Outcomes Within 10 Days (Univariate and Multivariate Analysis)

	Adjusted Odds Ratio	95% Confidence Interval	p Value
Abnormal electrocardiogram at presentation	6.9	3.1–15.1	0.000*
Trauma	2.9	1.4–5.9	0.004*
Absence of symptoms preceding syncope	2.4	1.2–4.8	0.016*
Male gender	2.2	1.0–4.5	0.037*

*Chi-square test; †Fisher exact test.
COPD = chronic obstructive pulmonary disease; ECG = electrocardiogram.

Table 8 Hospital Admission Adjusted With Long-Term Risk Factors (Logistic Regression)

	Adjusted Odds Ratio	95% Confidence Interval	p Value
Neoplasms	4.4	1.9–10.2	0.001*
Structural heart disease	2.8	1.3–5.9	0.008*
Age	3.3	2.0–5.5	0.000*
Hospital admission	4.1	1.7–9.7	0.001*

*Chi-square test.

Costantino et al. JACC, 2008

Table 3 Reasons and Time of Death, Age, and Gender of Each Patient Who Died Within 10 Days From the Emergency Department (ED) Visit

Patient #	Cause of Death	Elapsed Time From ED Visit	Admitted	Age (yrs)	Gender
1	DIC	24 h	Yes	62	M
2	Acute pulmonary edema	24 h	Yes	90	F
3	Aortic dissection	48 h	Yes	83	F
4	Pulmonary Embolism	24 h	No	72	M
5	Stroke	10 days	No	95	M

Causes of death confirmed by autopsy in Patients #1 and #2, by computed tomography scanning in Patient #3, and based on clinical diagnosis for Patients #4 and #5. A causal relationship between syncope and death within 24 to 48 h is highly likely because of the very short time lag between the 2 clinical events. A more weak relationship characterizes the remaining syncope that is the one associated with stroke and death at 10 days.
DIC = disseminated intravascular coagulation.

Table 7 Causes of Death From 11th Day Up to 1 Year After the Emergency Department Visit

Causes of Death	Patients, n
Undetermined	16
Sudden death	3
Pulmonary diseases	7
Cardiovascular diseases	5
Cerebrovascular diseases	3
Neoplasms	3
Others	3
Total	40

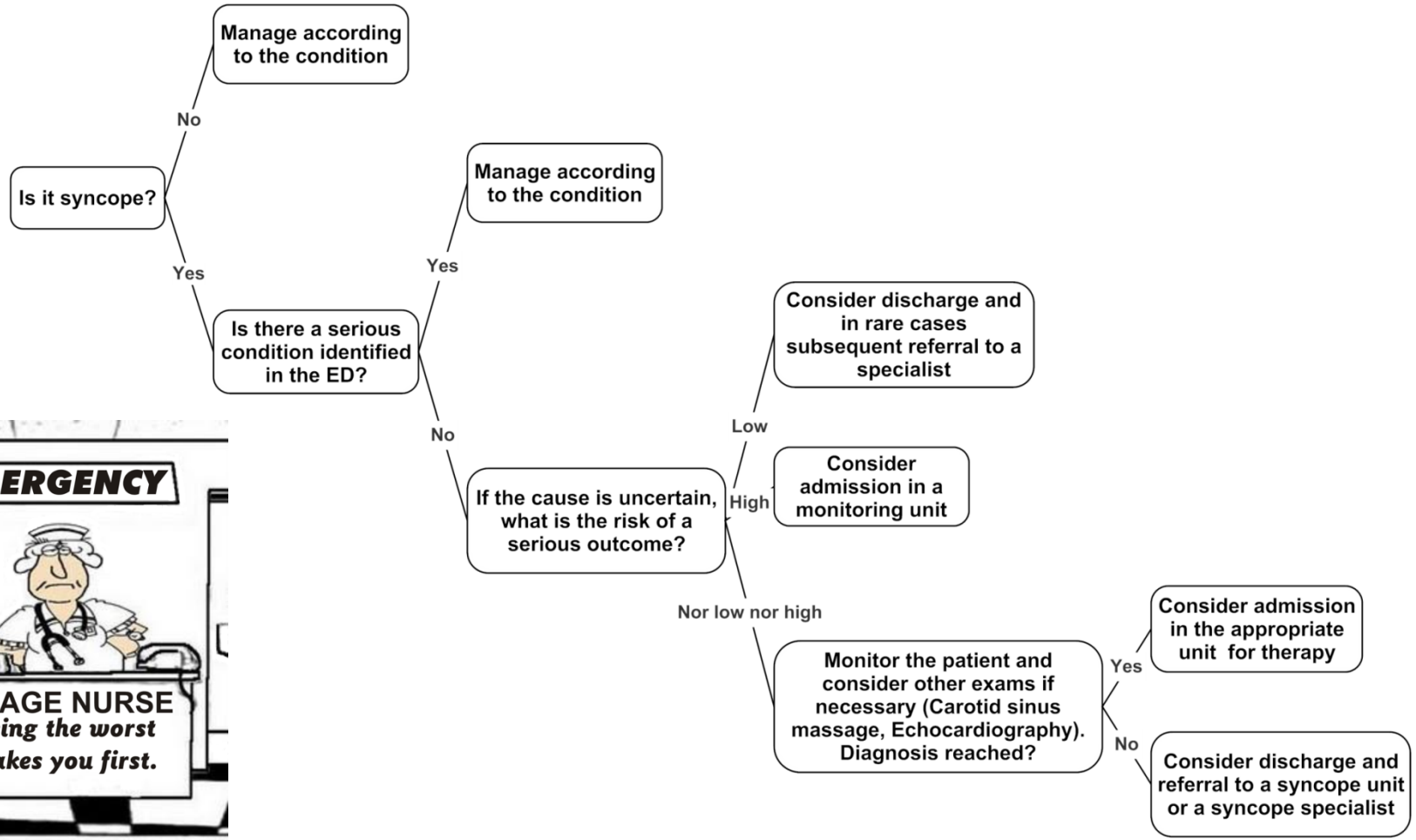
Costantino et al. JACC, 2008

Syncope clinical management in the Emergency Department: a consensus from the first international workshop on syncope risk stratification in the ED

European Heart Journal
doi:10.1093/eurheartj/ehv378

CURRENT OPINION

Syncope clinical management in the emergency department: a consensus from the first international workshop on syncope risk stratification in the emergency department



Se ricovero dove?

Se dimetto come?

Take home message

- Tra ricoverare e dimettere meglio osservare
- Non ricoverare dove non c’è telemetria
- Non dimettere senza aver osservato