



Società Italiana dell'Ipertensione Arteriosa
Lega Italiana contro l'Ipertensione Arteriosa



EVENTO FORMATIVO
INTERREGIONALE SIIA
PIEMONTE
LIGURIA
VALLE D'AOSTA

Torino, 14 ottobre 2023



Ipertensione nefrovascolare ed edema polmonare acuto «flash»

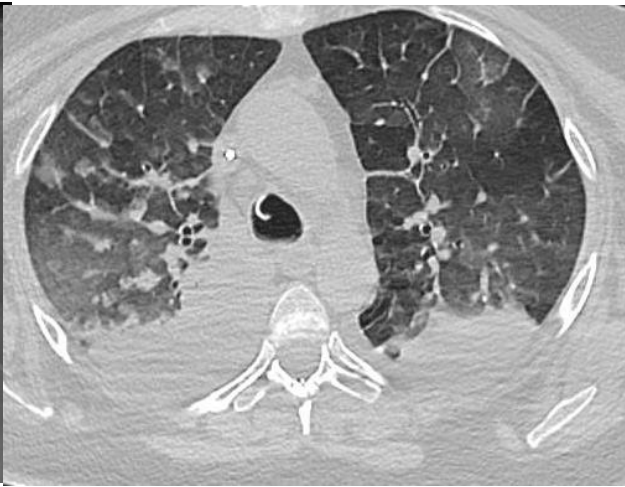
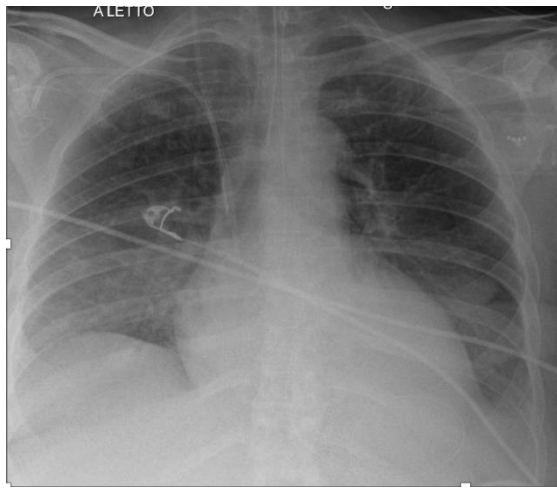
Dr Paola Mesiano

SCU Nefrologia, Dialisi e CMID

Ospedale San Giovanni Bosco
Dir Prof Dario Roccatello

- Donna 46 aa, fumatrice, obesa
- 39 aa carcinoma mammario: mastectomia, RT, CT, exemestane, triptorelina
- 40 aa (2017) ipertensione arteriosa (candesartan 16 mg, amiloride 5 mg/HCT 50 mg)

- 8/1/2023 in DEA dispnea e tosse da 1 h
 - PA 220/160 mmHg, FC 130 bpm, SpO2 60% AA
 - PH 7, PaCo2 76 mmHg, PaO2 69 mmHg
- ECG tachicardia sinusale FC 130/min, scarsa progressione R V1-V4, atipie diffuse recupero
- ECO fast VS con ipocinesia diffusa, FE ispettiva 25-30%, VCI 22 mm
- Consulenza cardiologica EPA iperteso in CMP non nota precedentemente
- Nitrati e furosemide ev. IOT. Ricovero in UTI



Infarto lacunare insulare dx

Estesi addensamenti parenchimali coinvolgenti entrambi i lobi polmonari inferiori con broncogramma aereo.

Sfumati addensamenti parenchimali a vetro smerigliato lobi superiori e lobo medio.

Minima falda di versamento pleurico in sede postero-basale.

Surrene sinistro lievemente ingrandito per possibile iperplasia



Ricovero in UTI

- Furosemide 125 mg ev, clonidina 150 mcg ev poi 2,5 mg cerotto, acetazolamide 250 mg, amlodipina 10 mg, ramipril 5 mg, carvedilolo 25 mg x2, nitroglicerina 10 mg. Ceftriaxone e azitromicina
- Creatinina 1.1 mg/dl → 2,59 mg/dl → 0,74 mg/dl il 14/1. PCT elevata fino a 8.33 mg/dl, GB 20000 mm³, ACR 26 mg/g, K 3.4 meq/l

UTI

- Valori pressori stabilizzatisi 150/90 mmHg
- Estubata il 12/1 (4 giorni)

Eccoardiogramma in UTI 12/1

VD non dilatato, IT lieve, VS non dilatato IVS concentrica SLV 14 mm, PP10 mm, FE preservata senza deficit maggiori di cinetica, $FE > 50\%$, diastole di II grado, VCI dilatata 22 mm, non collassabile.

Trasferita in AC 14/1

- Svezamento da O2

Dimessa il 20/1 con candesartan 16 mg,
amlodipina 10 mg, idroclorotiazide 12,5 mg,
doxazosina 2 mg

PA in dimissione 150/100 mmHg, FC 75 bpm

26/1 prima visita ambulatorio ipertensione

- PA 135/90 mmHg, FC 109 bpm (al domicilio PA 140/100)
- Sostituita idroclorotiazide con spironolattone (EGA estemporanea in visita K 3.3 mEq/l)
- Sostituita doxazosina con nebivololo
- Richiesti:
 - ED arterie renali
 - Studio surrenalico
 - ED TSA e RMN encefalo (pregresso infarto lacunare)

4/2/2023 in DEA (dispnea e tosse)

SO₂ 85% in AA → MV 50%, PA 170/120 mmHg, FC 100 bpm, T 37.6°C

EGA AA ph 7,47, pCO₂ 38 mmHg, pO₂ 45 mmHg, HCO₃ 37.5 mmol/l, lattati 0.9 Na 139 ,K 3,7 meq/l

ECO torace sindrome interstiziale basale bilaterale con minima falda di versamento pleurico

MV 60%, steroide, furosemide, → 2 h SpO₂ 95% in CN 2l/min
PA 125/80 mmHg

Ricovero in Medicina-Nefrologia

- TSH 1.24 microlU/ml, cortisolemia 12 microg/dl
- Normetanefrine 1378-1512 pmol/l (vn < 600)
- PET FDG negativa
- Saturimetria notturna OSAS moderato severo, indicato monitoraggio cardiorespiratorio notturno

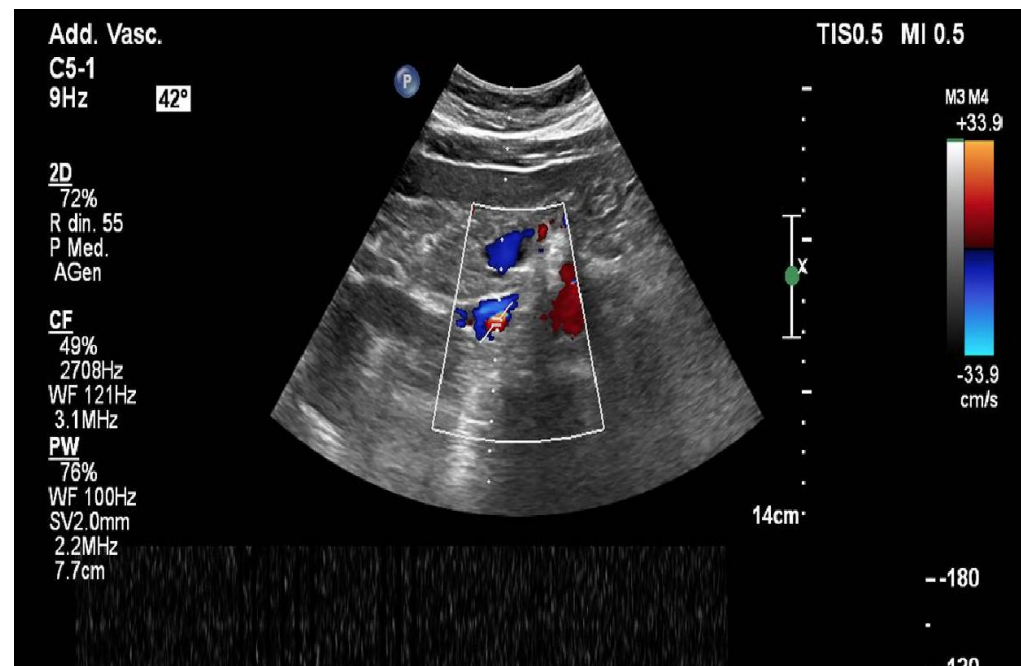
Flash pulmonary oedema and bilateral renal artery stenosis: the Pickering Syndrome[†]

Franz H. Messerli^{1*}, Sripal Bangalore², Harikrishna Makani¹, Stefano F. Rimoldi³, Yves Allemann³, Christopher J. White⁴, Stephen Textor⁵, and Peter Sleight⁶

- Edema polmonare acuto + polmonite
- Insufficienza respiratoria con sovraccarico polmonare (sindrome interstiziale bilaterale) a rapida risoluzione
- Ipertensione «resistente»
- Insufficienza renale acuta

9/2 Ecodoppler arterie renali

Turbolenze di
flusso fino a 34
m/s arteria
renale sinistra-
terzo medio con
IR 0,55



Angio-TC 14/2/2023



(A) Atherosclerotic renovascular disease

Prevalence:
6–14%^a

Suggestive symptoms, signs and findings

Resistant hypertension
Flash pulmonary edema
Rapidly declining kidney function
Acute renal function degradation on ACEi or ARB
Generalized atherosclerosis^b

1st choice screening test

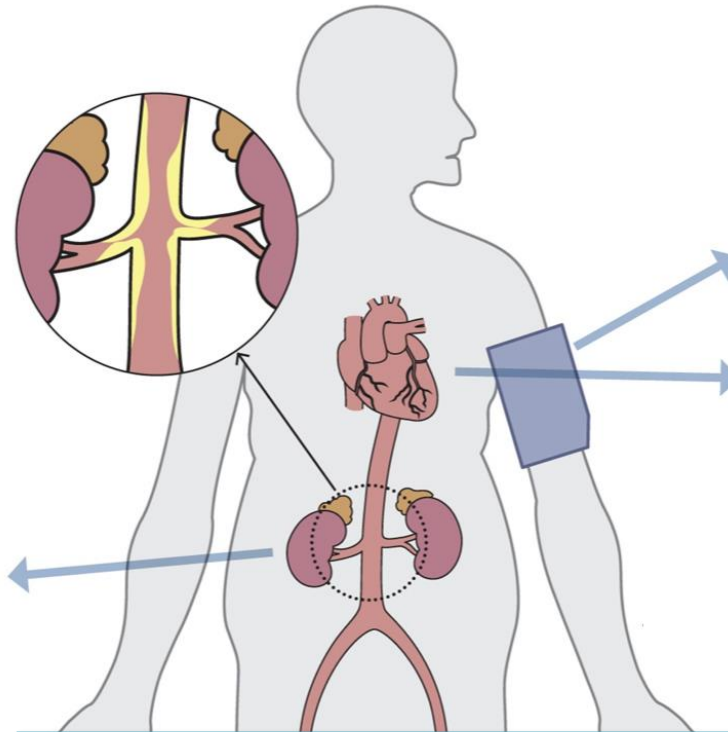
Renal artery duplex ultrasound;
otherwise angio-CT or angio-MR

Further work-up

Angio-CT or angio-MR
Invasive catheter angiography

Treatment^{c,d}

Antihypertensive treatment
Strict control of CV risk factors
Revascularization (selected cases)



Cardiovascular phenotype

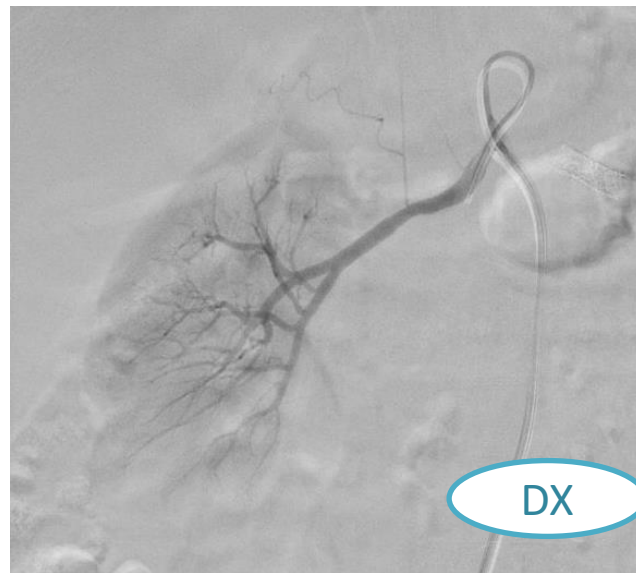
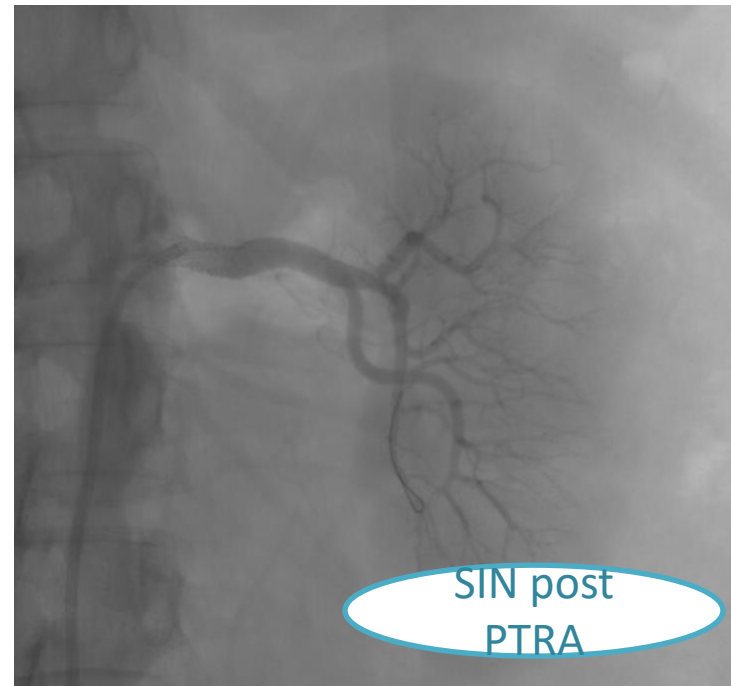
24h ABPM – resistant hypertension, frequent non-dipping

- LVH
- Decreased diastolic function
- Decreased systolic function

Increased CV Risk and mortality

Renal artery stenting in addition to medical therapy is associated with renal and CV benefits in patients presenting with high-risk ARVD phenotypes:

- 1) resistant hypertension
- 2) recurrent pulmonary edema
- 3) heart failure and
- 4) deterioration of kidney function.



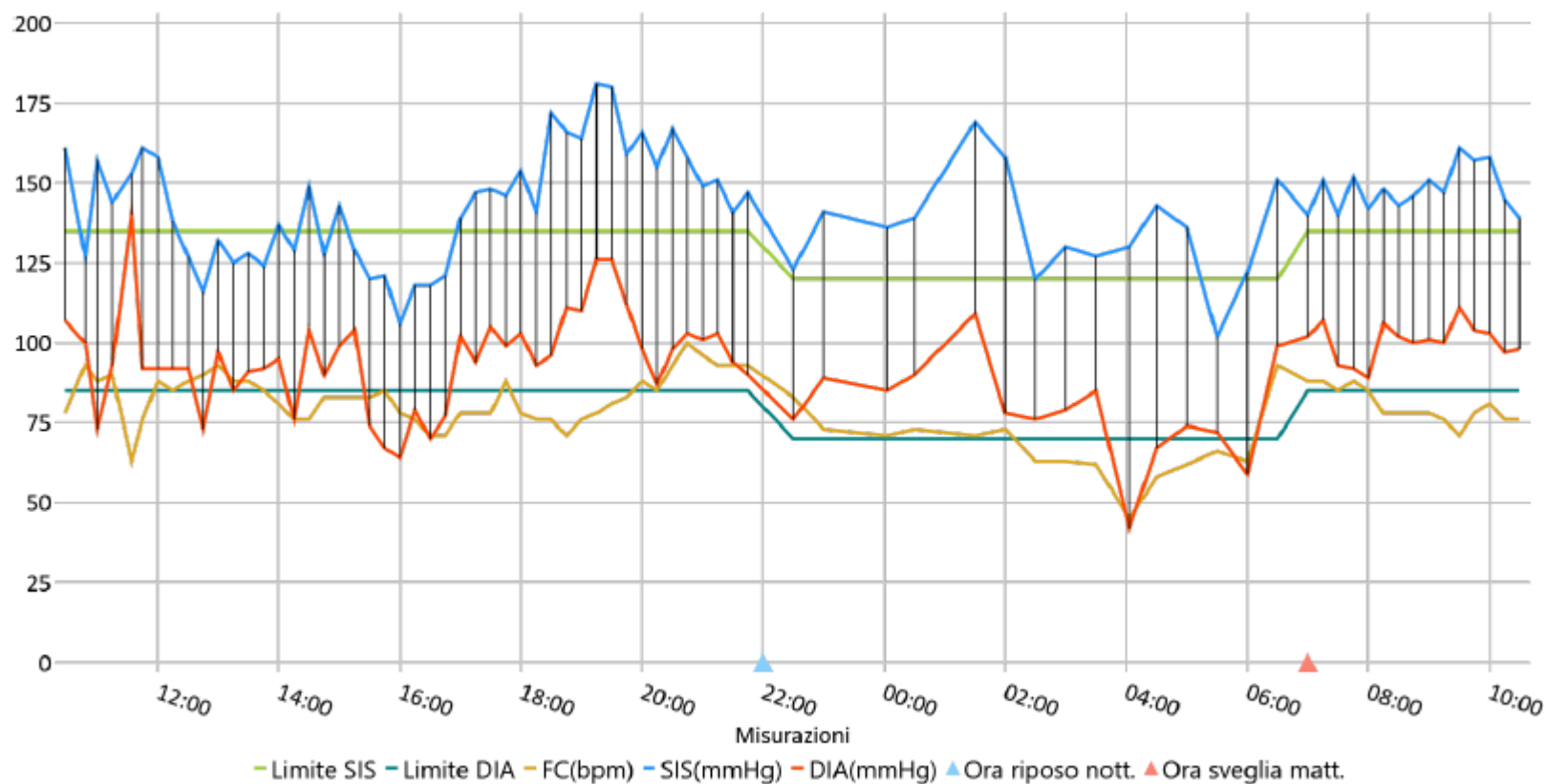
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Visita ambulatoriale 18/9

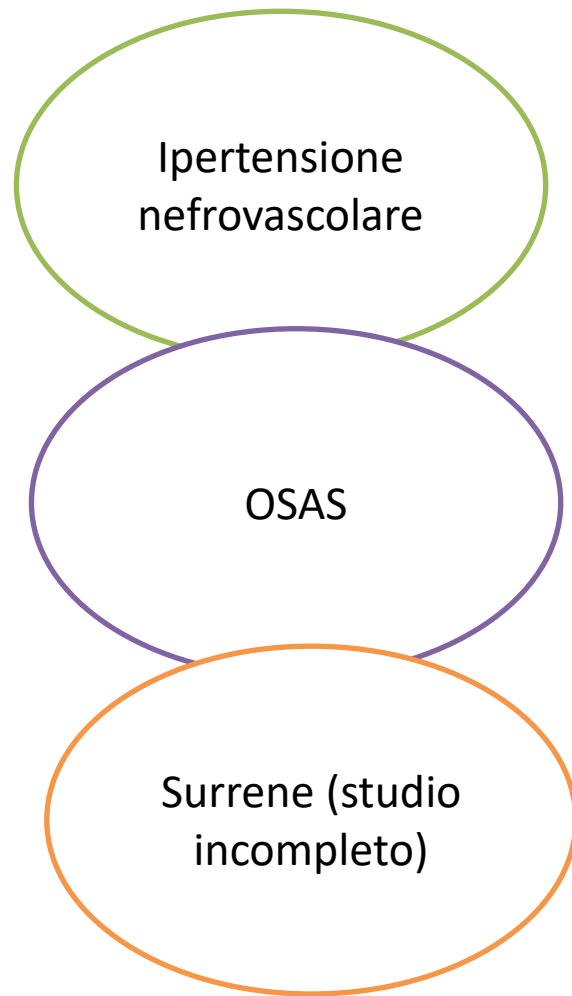
PA 134/93 mmHg
FC 90 bpm



24 h 142/92 mmhg G 144/96 mmHg N 135/78 mmHg

amlodipina 10 mg,
nebivololo 2,5 mg

candesartan 16 mg
potassio canreonato 50 mg/butizide 5 mg



EPA in stenosi
monolaterale arteria
renale (scompenso
diastolico? polmonite
concomitante?)

Patogenesi
aterosclerosi (fumo,
altro? Inibitore
dell'aromatasi?
Triptorelina?)