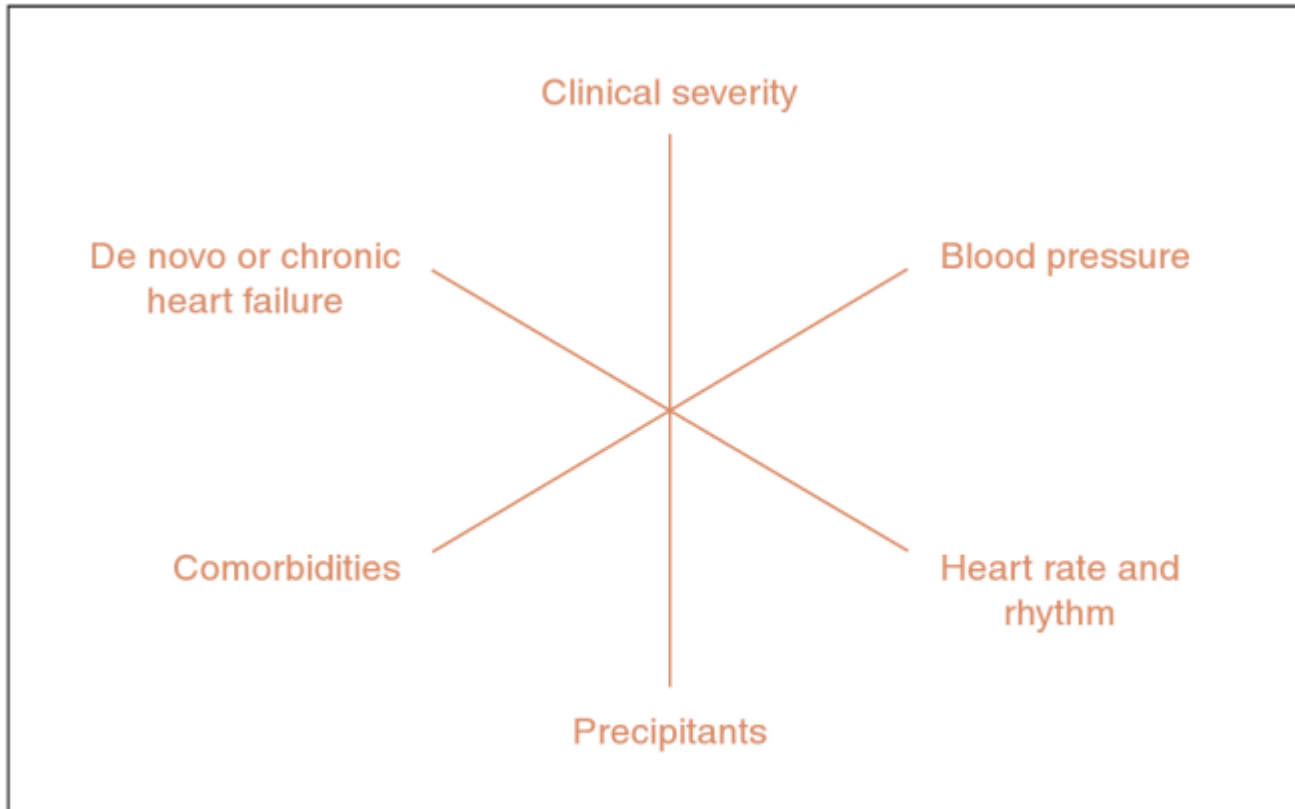


# Evaluarea imediata in insuficienta cardiaca acuta

# “Six-axis model”

- Concept propus de Gheorghide si Braunwald care presupune 6 factori ce ar trebui urmariti in momentul internarii unui pacient cu insuficienta cardiaca acuta ca posibili factori declansatori si tratati corespunzator din timpul spitalizarii (1)



- In ceea ce priveste comorbiditatile, trebuie luate in calcul, depistate si tratate din timpul internarii :

-diabetul zaharat

-insuficienta renala

-hipertensiunea arteriala

-bolile pulmonare cronice si/sau sindromul de apnee in somn

-anemia si hiposideremia

# Biomarkerii in insuficienta cardiaca acuta (ICA)

- Ingrijirea pacientilor cu insuficienta cardiaca acuta este redefinita prin prisma noilor instrumente ajutatoare- biomarkerii
- Biomarkeri consacratii- gold standard: BNP, NtproBNP- rol esential in diagnosticul, prognosticul si managementul ICA
- Exista noi categorii de biomarkeri implicati in fenomenul de suferinta miocardica, activare neurohormonala, remodelare ventriculara- promitatori in ceea ce priveste diagnosticul si prognosticul pacientilor cu ICA: peptid natriuretic proatrial midregional, ST2, galectin-3, troponina inalt sensibila (hsTn), cystatin C, hiposodemia, proadrenomedulina midregionala
- Exista biomarkeri utili in diagnosticul diferential al dispneei- ex: procalcitonina ( poate sugera un episod infectios acut pulmonar)
- Biomarkeri care prevestesc complicatiile ICA – ex: markeri ai suferintei renale-> biomarkeri cardiorenali

# De ce biomarkeri?

- -reproductibilitate, obiectivitate, disponibilitate, cost-eficienta
- Unii biomarkeri- peptidele natriuretice- au trecut de la rolul diagnostic si prognostic la rolul de element decizional in atitudinea terapeutica
- Importanta biomonitorizarii prin intermediul peptidelor natriuretice in orice moment: la camera de garda, in timpul spitalizarii, la externare, in perioada vulnerabila, la pacientul cronic
- Trebuie folositi si integrati in contextul clinic

- *Cei mai studiatii biomarkeri- peptidele natiuretice: BNP si NT-proBNP:*
  - sensibilitate 90%, specificitate 84%- insasi ghidurile aloca acestor biomarkeri un rol esential in diagnosticul pacientilor cu ICA- dozare lor reprezentand indicatie de clasa I.
  - peptidele natriuretice pot clasifica pacientii in functie de risc: inalt, intermediar, scazut si pot influenta decizia de internare la camera de garda. (2)
  - reprezinta si un element de referinta util in compararea succesiva a diferitelor etape din cursul bolii- parte din programul de monitorizare la domiciliu (3)

- TnHs- identifica pacientii cu insuficienta cardiaca si risc crescut de mortalitate intraspitaliceasca sau risc crescut de reinternare (4)
- Cystatin C – biomarker cardiorenal – prevesteste agravarea functiei renale si progresia catre sindromul cardiorenal (5,6)
- Copeptina ( arginin vasopresina) determina hiposodemie si poate afecta contractilitatea miocardica si tonusul vascular (7); predictor de mortalitate, reinternare in IC si prezentari la camera de garda – studiul BACH (8)
- Procalcitonina- predictor al mortalitatii la 6 luni in IC; dinamica procalcitoninei- in conditii noninfectioase la pacientii cu boli cardiovasculare este influentata de magnitudinea injuriei miocardice determinata de ischemie (9)

# “FoCUS eco” in ICA

- Focus eco presupune detectie rapida a modificarilor cardiace patologice-facilitand decizia terapeutica in primele ore de la internare
- Diferentierea intre IC cu disfunctie sistolica vs insuficienta cardiaca determinata de disfunctie diastolica izolata ( adesea superpozabila cu insuficienta cardiaca cu fractie prezervata) trebuie facuta rapid intrucat atitudinea terapeutica este diferita (10)
- Elemente importante:
  - Fluxul transmitral ( raportul E/A) – apreciaza relaxarea VS
  - Presiunile de umplere VS (E/e')
  - Volumul AS (indexat)
  - Fluxul in venele pulmonare, Vp, E/Vp,



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