

Managing theoretical single-disease guideline recommendations for actual multiple-disease patients

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Theoretical single-disease guideline recommendations

Ischemic heart disease

Recommendations

1. For patients with stable angina and hypertension, β -adrenergic antagonists are preferred as initial therapy (grade D).
2. Alternative therapies would include long-acting calcium-channel blockers (grade B). Short-acting calcium-channel blockers should not be used (grade C).
3. Patients with hypertension and a recent myocardial infarction should be treated with either β -adrenergic antagonists, ACE inhibitors or both. Both classes of drug protect against reinfarction and death (grade A).
4. Alternative therapies would include verapamil (grade A) and diltiazem (grade C), but only in the setting of normal left ventricular function.

Renal disease

Recommendations

- ...
3. For patients with hypertension and renal disease, preferred initial therapy is with an ACE inhibitor (grade A).
 4. Diuretics are recommended as additional antihypertensive therapy, since patients with renal insufficiency usually have difficulty with sodium balance (grade D).
 5. Dihydropyridine calcium-channel blockers are recommended as alternative therapy for renoprotection in patients with nondiabetic renal disease (grade B).

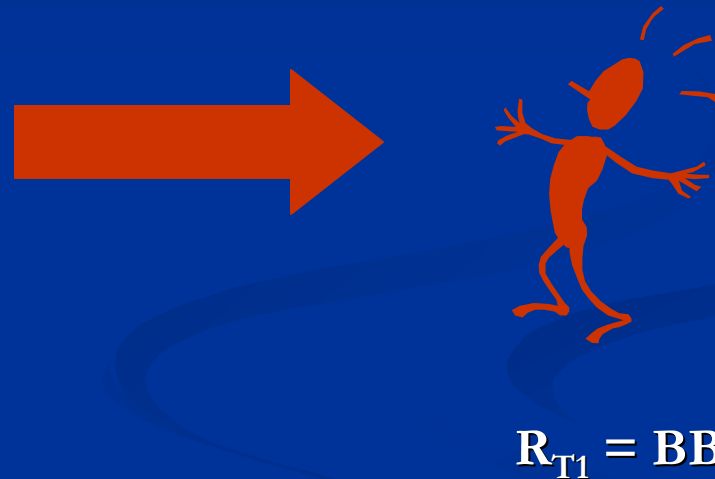
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HT and stable angina



Theoretical single-disease guideline recommendations

HT and renal disease



R_{T2} = ACE inhibitors



Renal disease

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What about actual multiple-disease patients ?

- 65 years old

- HT

- Renal disease

- Stable angina

- Systolic dysfunction

$R_{T1} ?$

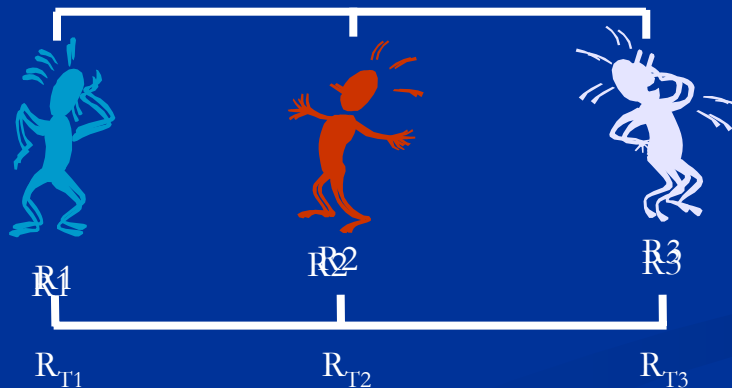
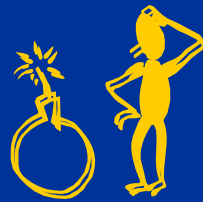
$R_{T2} ?$

$R_{T3} ?$

$R_{T1} \wedge R_{T2} ?$

$R_{T1} \wedge R_{T3} ?$

$R_{T1} \wedge R_{T2} \wedge R_{T3} ?$



Information processing model

