

MEETING



FAR MA CÊU TICO

#MUITO
MAIS



Interações Medicamentosas - Casos Clínicos

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Qual a definição?

- É uma resposta farmacológica ou clínica, causada pela combinação de medicamentos, diferente dos efeitos de dois medicamentos dados individualmente. O resultado final pode aumentar ou diminuir os efeitos desejados.



Quais são as populações de risco?



Onde procurar?





BRASIL

Simplifique!

Participe

Acesso à informação

Legislação

Canais



ACESSAR

CADASTRAR-SE



YouTube

INÍCIO

SOBRE O PORTAL

BASES DE DADOS

CONTATO



FARMACÊUTICO #MUITO MAIS

Ir para: [MEDICAMENTO -MEDICAMENTO \(3\)](#) | [Duplicação de ingredientes \(0\)](#) | [ALERGIA \(0\)](#) | [ALIMENTO \(1\)](#) | [ETANOL \(0\)](#) | [LABORATÓRIO \(1\)](#) | [TABACO \(0\)](#) | [GRAVIDEZ \(6\)](#) | [LACTAÇÃO \(6\)](#)

Medicamento-Medicamento Interações (3)

Medicamentos:	Gravidade:	Documentação:	Resumo:
ALBUTEROL -- CARVEDILOL	 Major	Fair	Concurrent use of BETA-ADRENERGIC BLOCKERS and BETA-2 AGONISTS may result in severe bronchospasm and decreased effectiveness of the beta-2 agonist.
ENALAPRIL MALEATE -- SPIRONOLACTONE	 Major	Good	Concurrent use of POTASSIUM-SPARING DIURETICS and ANGIOTENSIN CONVERTING ENZYME INHIBITORS may result in hyperkalemia.
ENALAPRIL MALEATE -- FUROSEMIDE	 Moderate	Good	Concurrent use of ANGIOTENSIN CONVERTING ENZYME INHIBITORS and LOOP DIURETICS may result in postural hypotension (first dose).

Duplicação de ingredientes (Nenhuma encontrada)

Medicamento-ALERGIA Interações (Nenhuma encontrada)

Medicamento-ALIMENTO Interações (1)

Medicamentos:	Gravidade:	Documentação:	Resumo:
FUROSEMIDE	 Moderate	Excellent	Concurrent use of FUROSEMIDE and FOOD may result in decreased furosemide exposure and efficacy.

Caso Clínico 1

- Paciente J.E.S, 72 anos (sexo masculino).
- Possui história médica pregressa de:
 - **HAS**
 - **DM2**
 - **DAC** (IAM em julho de 2019, submetido à colocação de *stent* metálico)
 - **ICC**

Caso Clínico 1

- Nega uso de outros medicamentos, além dos prescritos:

- Enalapril 20mg 2x ao dia
- Espironolactona 25mg 1x ao dia
- Aspirina 100mg 1x ao dia
- Clopidogrel 75mg 1x ao dia
- Carvedilol 6,25mg 2x ao dia
- Sinvastatina 40mg 1x ao dia, antes de dormir
- Anlodipino 10mg 1 x ao dia
- Furosemida 20mg 1x ao dia
- Metformina 850mg 2x ao dia
- Omeprazol 20mg 1x ao dia

Interações medicamentosas do caso

Enter a drug, OTC or herbal supplement: Print

22 Interactions Found

Patient Regimen Clear All ⊗

- omeprazole ⊗
- enalapril ⊗
- spironolactone ⊗
- furosemide ⊗
- aspirin ⊗
- clopidogrel ⊗
- carvedilol ⊗
- simvastatin ⊗
- amlodipine ⊗
- metformin ⊗


Serious - Use Alternative

aspirin + enalapril

aspirin, enalapril. pharmacodynamic antagonism. Avoid or Use Alternate Drug. Coadministration may result in a significant decrease in renal function. NSAIDs may diminish the antihypertensive effect of ACE inhibitors. The mechanism of these interactions is likely related to the ability of NSAIDs to reduce the synthesis of vasodilating renal prostaglandins.

omeprazole + clopidogrel

omeprazole decreases effects of clopidogrel by affecting hepatic enzyme CYP2C19 metabolism. Avoid



Interações graves

aspirin + enalapril

aspirin, enalapril. pharmacodynamic antagonism. Avoid or Use Alternate Drug. Coadministration may result in a significant decrease in renal function. NSAIDs may diminish the antihypertensive effect of ACE inhibitors. The mechanism of these interactions is likely related to the ability of NSAIDs to reduce the synthesis of vasodilating renal prostaglandins.

omeprazole + clopidogrel

omeprazole decreases effects of clopidogrel by affecting hepatic enzyme CYP2C19 metabolism. Avoid or Use Alternate Drug. Clopidogrel efficacy may be reduced by drugs that inhibit CYP2C19. Inhibition of platelet aggregation by clopidogrel is entirely due to an active metabolite. Clopidogrel is metabolized to this active metabolite in part by CYP2C19.

amlodipine + simvastatin

amlodipine increases levels of simvastatin by Other (see comment). Avoid or Use Alternate Drug.

Comment: Benefits of combination therapy should be carefully weighed against the potential risks of combination. Potential for increased risk of myopathy/rhabdomyolysis. Limit simvastatin dose to no more than 20 mg/day when used concurrently.

aspirin + clopidogrel

aspirin, clopidogrel. Either increases toxicity of the other by pharmacodynamic synergism. Use Caution/Monitor. The need for simultaneous use of low-dose aspirin and anticoagulant or antiplatelet agents are common for patients with cardiovascular disease; monitor closely.

enalapril + spironolactone

enalapril, spironolactone. Mechanism: pharmacodynamic synergism. Use Caution/Monitor. Risk of hyperkalemia.

O que fazer?



O que fazer?

1º) Verificar a gravidade e, se possível, a documentação da interação

Gravidade

- Contraindicada
- Grave
- Moderada
- Leve

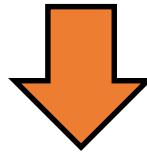
Documentação

- Excelente
- Boa
- Fraca
- Desconhecida

O que fazer?

• 2º)

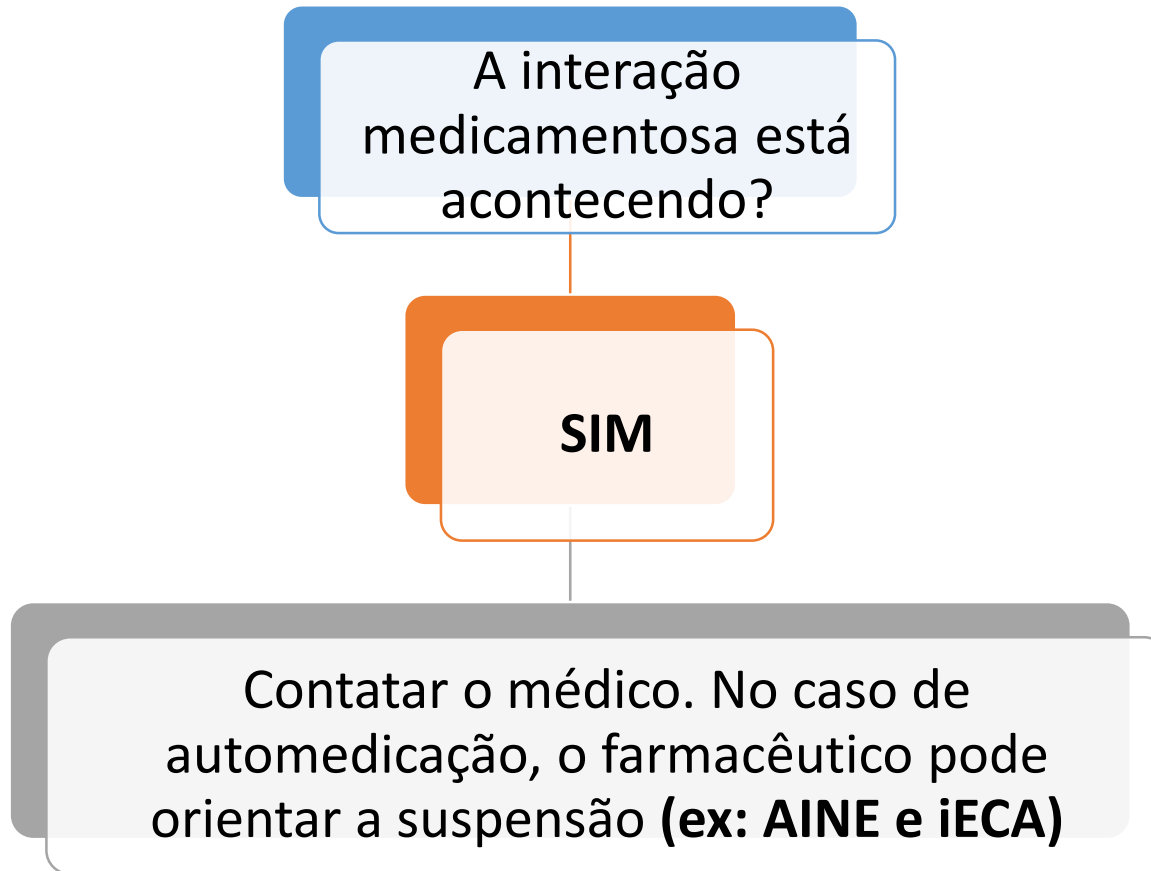
Associação contraindicada?



- Contatar o médico.
- No caso de automedicação, o farmacêutico pode orientar a suspensão.

O que fazer?

- 3º) No caso de interações **graves**, moderadas e leves:



Exemplo

enalapril + spironolactone

enalapril, spironolactone. Mechanism: pharmacodynamic synergism. Use Caution/Monitor. Risk of hyperkalemia.

$K^+ = 5,6 \text{ mEq/L}$



- Sugerir ao médico suspensão (temporária) da espironolactona

amlodipine + simvastatin

amlodipine increases levels of simvastatin by Other (see comment). Avoid or Use Alternate Drug.

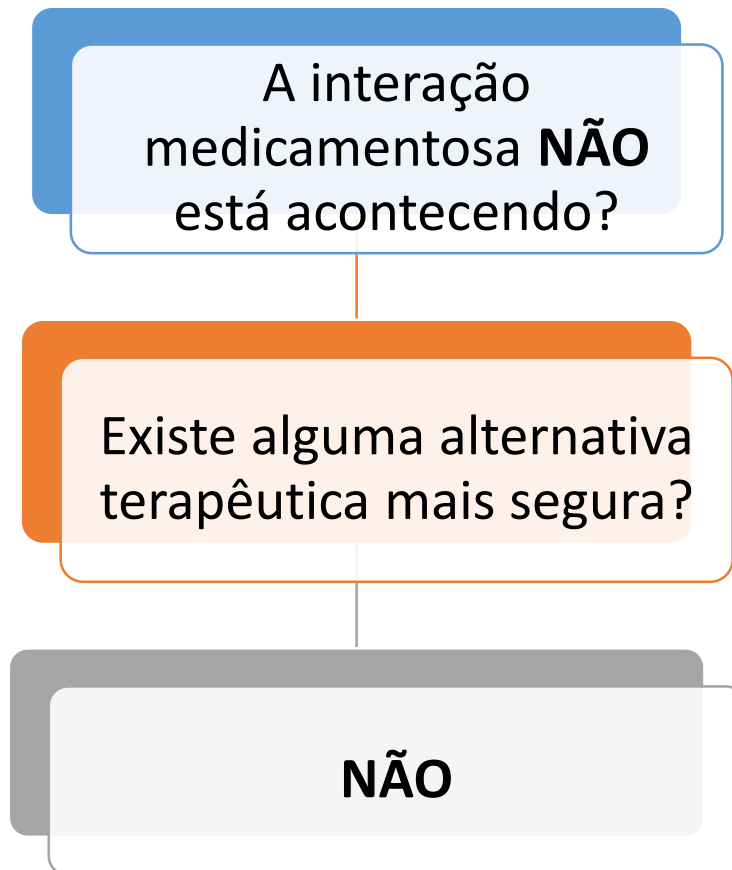
Comment: Benefits of combination therapy should be carefully weighed against the potential risks of combination. Potential for increased risk of myopathy/rhabdomyolysis. Limit simvastatin dose to no more than 20 mg/day when used concurrently.

$CPK^+ = 400 \text{ U/L}$ e paciente com dor muscular



- Sugerir ao médico substituição por estatina menos lipossolúvel

O que fazer?



Exemplo

enalapril + spironolactone

enalapril, spironolactone. Mechanism: pharmacodynamic synergism. Use Caution/Monitor. Risk of hyperkalemia.

- iECA e BRA apresentam mesmas interações com a espironolactona

amlodipine + simvastatin

amlodipine increases levels of simvastatin by Other (see comment). Avoid or Use Alternate Drug.

Comment: Benefits of combination therapy should be carefully weighed against the potential risks of combination. Potential for increased risk of myopathy/rhabdomyolysis. Limit simvastatin dose to no more than 20 mg/day when used concurrently.

- O paciente tem condições de adquirir uma estatina menos lipossolúvel?

O que fazer?

Não existe alternativa mais segura
ou o paciente não consegue
adquirir

O paciente pode ficar sem
algum dos
medicamentos?

Não

Exemplo

enalapril + spironolactone

enalapril, spironolactone. Mechanism: pharmacodynamic synergism. Use Caution/Monitor. Risk of hyperkalemia.

- iECA e espironolactona indicado para pacientes com FE $\leq 35\%$

amlodipine + simvastatin

amlodipine increases levels of simvastatin by Other (see comment). Avoid or Use Alternate Drug.

Comment: Benefits of combination therapy should be carefully weighed against the potential risks of combination. Potential for increased risk of myopathy/rhabdomyolysis. Limit simvastatin dose to no more than 20 mg/day when used concurrently.

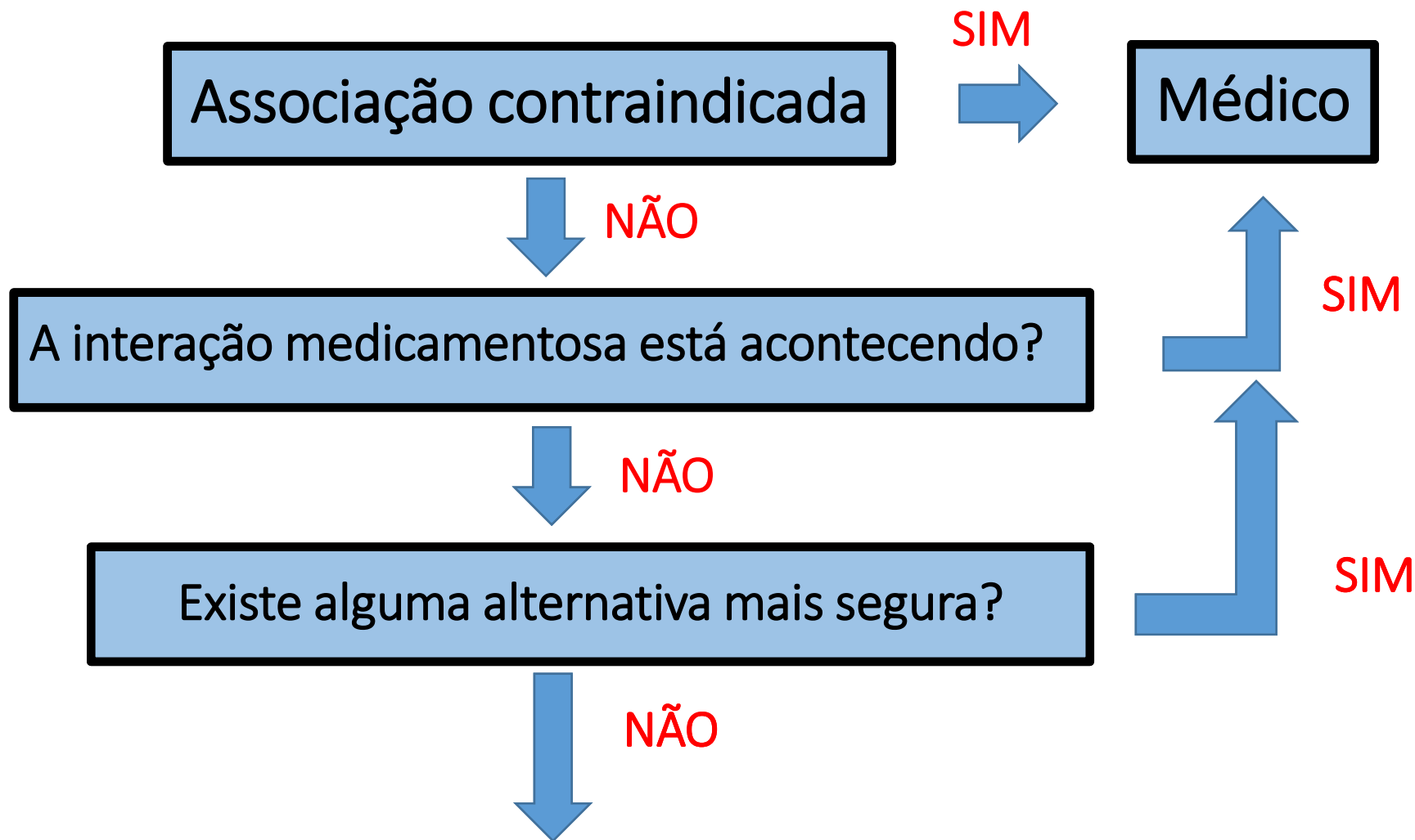
- Paciente em uso de terapia de primeira linha para hipertensão e possui indicação formal de estatina, independente dos valores lipídicos

O que fazer?

O paciente NÃO pode ficar sem os medicamentos

MONITORE

Resumindo



NÃO

O paciente pode ficar sem algum dos medicamentos?

SIM

Médico

NÃO

MONITORE

- Exames labs
- Sintomas
- Sinais físicos
- Queixas

Outras interações

aspirin + enalapril

aspirin, enalapril. pharmacodynamic antagonism. Avoid or Use Alternate Drug. Coadministration may result in a significant decrease in renal function. NSAIDs may diminish the antihypertensive effect of ACE inhibitors. The mechanism of these interactions is likely related to the ability of NSAIDs to reduce the synthesis of vasodilating renal prostaglandins.

omeprazole + clopidogrel

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Caso Clínico 2

- Paciente M.E.S, 68 anos (sexo feminino)
- Possui história médica pregressa de:
 - **HAS**
 - **Dislipidemia**
 - **Estenose mitral severa** (troca valvar em 2002 – válvula metálica)

Caso Clínico 2

- Farmacoterapia atual:

- Losartana 50mg 2x ao dia
- Hidroclorotiazida 25mg 1 x ao dia
- Sinvastatina 40mg 1x ao dia, antes de dormir
- Varfarina 5mg 1x ao dia
- Ibuprofeno 400mg 3x ao dia (automedicação.
Em uso há 5 dias para dor nas costas – s.i.c)

Caso clínico 2

ibuprofen + losartan

ibuprofen decreases effects of losartan by pharmacodynamic antagonism. Modify Therapy/Monitor Closely. NSAIDs decrease synthesis of vasodilating renal prostaglandins, and thus affect fluid homeostasis and may diminish antihypertensive effect.

PA = 160/90mmHg

warfarin + ibuprofen

warfarin and ibuprofen both increase anticoagulation. Modify Therapy/Monitor Closely.

RNI = 3,8

Caso clínico 2

- Suspende ibuprofeno, prescrever paracetamol e/ou encaminhar ao médico (a depender da anamnese farmacêutica)
- Reavaliar a pressão arterial e o RNI

Caso Clínico 3

- Paciente A.E.S, 69 anos (sexo masculino)
- Possui história médica pregressa de:
 - **HAS**
 - **Fibrilação atrial permanente**
 - **Dislipidemia**

Caso Clínico 3

- Farmacoterapia atual:

- Anlodipino 5mg 2x ao dia
- Carvedilol 12,5mg 2 x ao dia
- Sinvastatina 20mg 1x ao dia, antes de dormir
- Amiodarona 200mg 1x ao dia
- Varfarina 5mg 1x ao dia

Relato de prontuário: RNI lábil

Caso clínico 3

- Investigar automedicação e alimentação

Serious - Use Alternative

vitamin K1 (phytonadione) + warfarin

vitamin K1 (phytonadione) decreases effects of warfarin by pharmacodynamic antagonism. Avoid or Use Alternate Drug. Monitor for decreased prothrombin time or therapeutic effects.



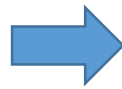
Caso clínico 3

Serious - Use Alternative

amiodarone + warfarin

amiodarone increases levels of warfarin by decreasing metabolism.

Avoid or Use Alternate Drug.



Corrigir dose de varfarina pelo RNI

amiodarone + carvedilol

amiodarone will increase the level or effect of carvedilol by affecting hepatic enzyme CYP2D6 metabolism.

Use Caution/Monitor. Monitor for signs of bradycardia or heart block when amiodarone and a beta adrenergic blocker are coadministered. Amiodarone should be used with caution in patients receiving a beta adrenergic blocker, particularly if there is suspicion of underlying dysfunction of the sinus node, such as bradycardia or sick sinus syndrome, or if there is partial AV block.



**FC = 43bpm →
contatar o médico**

Caso Clínico 4

- Paciente F.O.P, 50 anos (sexo feminino).
- Possui história médica pregressa de:
 - **HAS**
 - **Depressão**
 - **Fibromialgia**

Caso Clínico 4

- Nega uso de outros medicamentos, além dos prescritos:

- Enalapril 10mg 2x ao dia
- Fluoxetina 20mg 1x ao dia
- Amitriptilina 25mg 1x ao dia

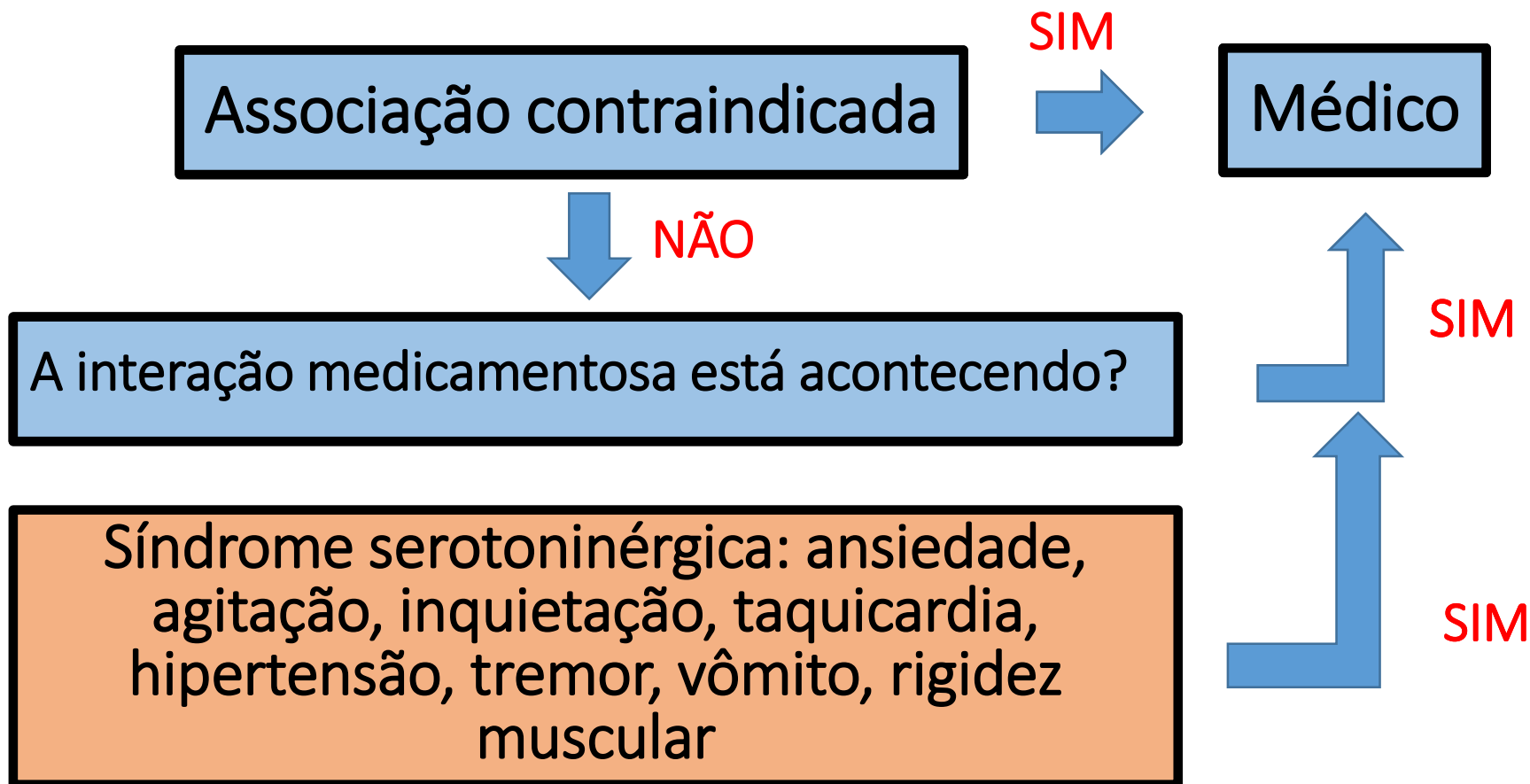
Caso clínico 4

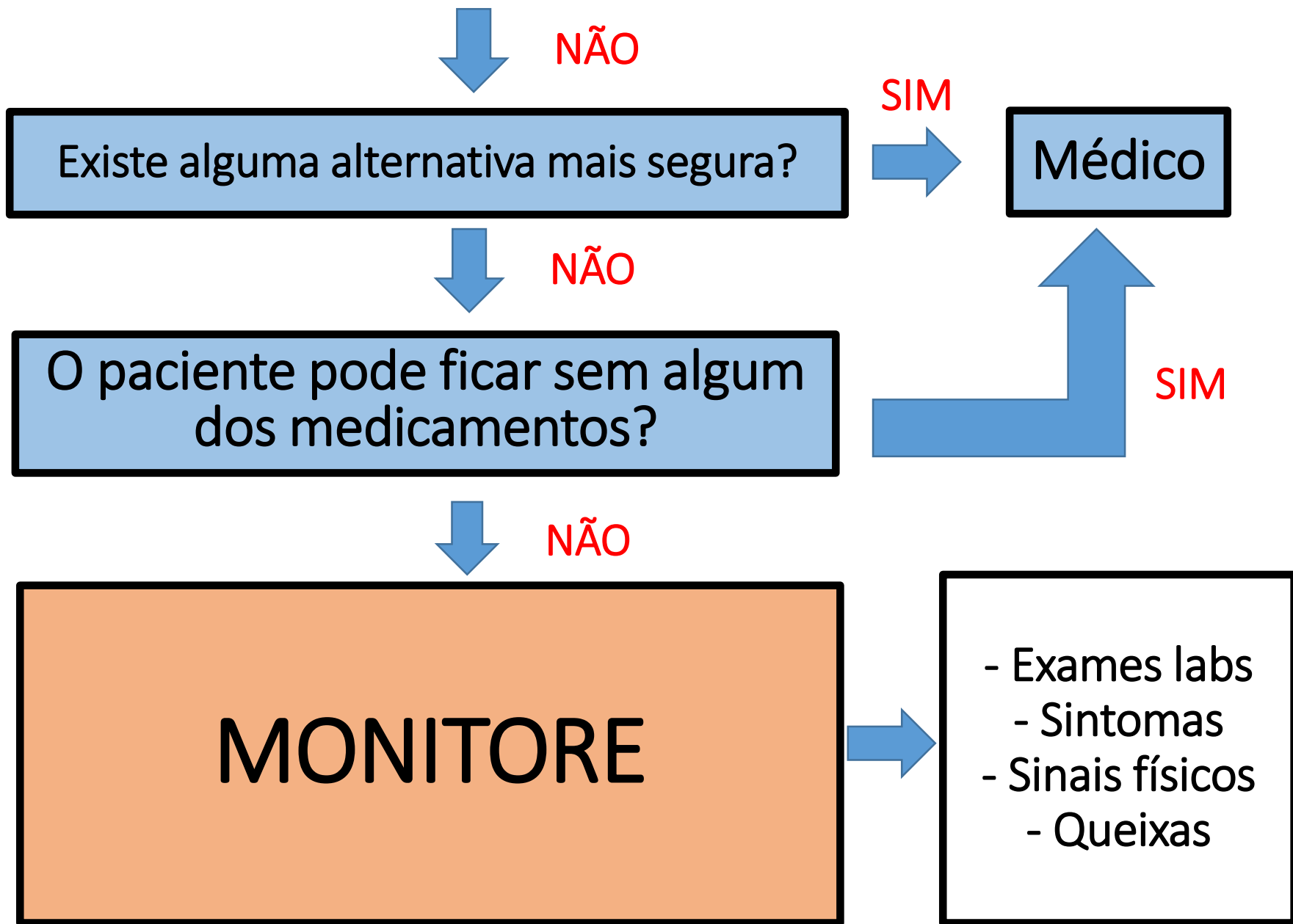
Serious - Use Alternative

fluoxetine + amitriptyline

fluoxetine and amitriptyline **both**
increase serotonin levels. Avoid or
Use Alternate Drug.

Resumindo





LEMBRE-SE!!!

Monitorar seu paciente é o segredo para o manejo da maioria das interações medicamentosas!

OBRIGADA

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