[doc sps="1.9" acron="abc" jtitle="Arquivos Brasileiros de Cardiologia" stitle="Arq. Bras. Cardiol." issn="0066-782X" eissn="1678-4170" pubname="Sociedade Brasileira de Cardiologia - SBC" license="http://creativecommons.org/licenses/by/4.0/" volid="110" issueno="1" dateiso="20210600" season="July" order="01" fpage="102" lpage="103" artdate="20210701" pagcount="02" doctopic="le" language="en"][doi]10.5935/abc.20180009[/doi]

[toctitle]**Letter to the Editor**[/toctitle]

[doctitle]Cardiac Cachexia - A Window to the Wasting Disorders[/doctitle]

[author role="nd" rid="aff1"][fname]Andrew J Stewart[/fname] [surname]Coats[/surname][xref ref-type="aff" rid="aff1"]1[/xref][/author]

[normaff id="aff1" ncountry="Not normalized" norgname="Not normalized" icountry="IT"][label]1[/label][orgname]IRCCS[/orgname], [city]Roma [/city]- [country]Italy[/country][/normaff]

[kwdgrp language="en"][sectitle]Keywords:[/sectitle] [kwd]Cachexia[/kwd]; [kwd]Wasting Syndrome[/kwd]; [kwd]Exercise[/kwd]; [kwd]Nutritional Physiological Phenomena.[/kwd][/kwdgrp]

[xmlbody][sec][sectitle]**To The Editor**[/sectitle]

[p]I read with interest the recent review by Okoshi and colleagues in the journal.[xref ref-type="bibr" rid="r1"]1[/xref]This was a thoroughly enjoyable read that reviewed the main areas of focus. I would like, however, to reinforce some of the arguments. In the section on neurohormonal blockade there has also been a successful phase 2 trial of the fourth generation beta-blocker espindolol in cancer cachexia.[xref ref-type="bibr" rid="r2"]2[/xref],[xref ref-type="bibr" rid="r3"]3 [/xref]Clearly beta-blockers can be helpful also in cardiac cachexia given their crucial role in heart failure in general. Other cardiovascular drugs are also being explored for their beneficial or protective effects on skeletal muscle. These include, as the authors point out, the ACE inhibitor Imidapril. Others including trimetazidine are also being studied.[xref ref-type="bibr" rid="r4"]4[/xref] One issue of difficulty is that we are starting from the point of no effective therapies and testing therapies one by one. The true multi-system complexity of cachexia and yet its similarity across different organ failure syndromes implies it will be a multi-barrelled approach that may be needed to solve it. We may need to combine neurohormonal blockade, immune modulation, nutritional and exercise support with pro-anabolic agents to get real clinical benefits. Perhaps as the authors point out Cardiac Cachexia where several of these agents are already on board may be a good place to start. The time for a much greater focus on all cachexias, including of course cardiac cachexia, is truly here and now.[xref ref-type="bibr" rid="r5"]5[/xref][/p][/sec][/xmlbody]

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[corresp id="c1"]Mailing Address: Andrew • Monash University, 3068, Melbourne, Australia Manuscript received August 13, 2017, revised manuscript September 28, 2017, accepted September 28, 2017[/corresp]

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[author role="nd" rid="aff2"][fname]Marina P.[/fname] [surname]Okoshi[/surname][/author]

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[xmlbody][p]We truly appreciate the comments on our review manuscript published in the journal.[xref ref-type="bibr" rid="r6"]1[/xref]The authors reinforced our point of view by citing some papers published after the submission of our manuscript. We agree that we should immediately initiate a greater focus on cachexia of all causes aiming its prevention and treatment. While nutritional support has been long recommended for cachexia management, only more recently was exercise highlighted as a tool to manage muscle wasting and sarcopenia.[xref ref-type="bibr" rid="r7"]2[/xref]-[xref ref-type="bibr" rid="r9"]4[/xref] As correctly pointed out, due the capacity to prevent body weight loss in heart failure patients with reduced ejection fraction, neurohormonal blockade has also been evaluated in non-cardiac cachexia. [/p]

[p]However, concerning other therapies such as immune modulation and pro-anabolic agents, there is no convincingly evidence for a positive response[xref ref-type="bibr" rid="r8"]3[/xref],[xref ref-type="bibr" rid="r10"]5[/xref],[xref ref-type="bibr" rid="r11"]6[/xref]suggesting that additional studies are needed before we can effectively prevent and treat cachexia associated with different diseases including chronic heart and renal failure, cancer, and chronic obstructive pulmonary disease.[/p][/xmlbody]

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[subdoc id="s2" subarttp="translation" language="pt"][toctitle]**Carta ao Editor**[/toctitle]

[doctitle language="pt"]*Caquexia Cardíaca - Uma Janela para os Distúrbios de Emaciação*[/doctitle]

[author role="nd" rid="aff6"][fname]Andrew J Stewart[/fname] [surname]Coats[/surname][xref ref-type="bibr" rid="aff6"]1[/xref][/author]

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[hist]Artigo recebido em [received dateiso="20170813"]13/08/2017[/received], revisado em [revised dateiso="20170928"]28/09/2017[/revised], aceito em [accepted dateiso="20170928"]28/09/2017[/accepted][/hist]

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[xmlbody][sec][sectitle]**Ao Editor**[/sectitle]

[p]Li com interesse a recente revisão de Okoshi et al.[xref ref-type="bibr" rid="r1"]1[/xref]Foi uma leitura muito agradável que analisou as principais áreas de foco. No entanto, gostaria de reforçar alguns dos argumentos. Na seção sobre bloqueio neuro-hormonal, também houve um teste de fase 2 bem-sucedido do betabloqueador de quarta geração espindolol na caquexia de câncer.[xref ref-type="bibr" rid="r2"]2[/xref],[xref ref-type="bibr" rid="r3"]3[/xref]Claramente, os betabloqueadores também podem ser úteis na caquexia cardíaca devido ao seu papel crucial na insuficiência cardíaca em geral.[/p]

[p]Outras drogas cardiovasculares também estão sendo investigadas pelos seus efeitos benéficos ou protetores sobre o músculo esquelético. Estes incluem, como observamos autores, o inibidor da ECA Imidapril. Outros, incluindo a trimetazidina, também estão sendo estudados.[xref ref-type="bibr" rid="r4"]4[/xref] Um assunto problemático é que estamos começando do ponto de que não há terapias efetivas e testando as terapias uma a uma. A verdadeira complexidade multisistema da caquexia e ainda a sua semelhança em diferentes síndromes de falência orgânica implica uma abordagem multifocal a qual pode ser necessária para resolvê-la. Podemos precisar combinar bloqueio neuro-hormonal, modulação imunológica, suporte nutricional e exercícios com agentes pró-anabolizantes para obter benefícios clínicos reais. Talvez, como os autores apontam, a Caquexia Cardíaca, onde vários desses agentes já participam, pode ser um bom lugar para começar. O momento para um foco muito maior em todas as caquexias, incluindo, naturalmente, a caquexia cardíaca, é realmente aqui e agora.[xref ref-type="bibr" rid="r5"]5[/xref][/p][/sec][/xmlbody]

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[author role="nd" rid="aff7"][fname]Marina P.[/fname] [surname]Okoshi[/surname][/author]

[author role="nd" rid="aff8"][fname]Rafael V.[/fname] [surname]Capalbo[/surname][/author]

[author role="nd" rid="aff9"][fname]Fernando G.[/fname] [surname]Romeiro[/surname][/author]

[author role="nd" rid="aff10"][fname]Katashi[/fname] [surname]Okoshi[/surname][/author]

[xmlbody][p]Realmente apreciamos os comentários no nosso manuscrito de revisão publicado na revista.[xref ref-type="bibr" rid="r12"]1[/xref]Os autores reforçaram nosso ponto de vista citando alguns trabalhos publicados após a submissão do nosso manuscrito. Concordamos que devemos iniciar imediatamente um foco maior na caquexia por todas as causas, visando a sua prevenção e tratamento. Embora o suporte nutricional tenha sido recomendado há muito tempo para o gerenciamento da caquexia, apenas mais recentemente o exercício foi destacado como uma ferramenta para gerenciar a perda de massa muscular e a sarcopenia.[xref ref-type="bibr" rid="r13"]2[/xref]-[xref ref-type="bibr" rid="r15"]4[/xref] Como corretamente apontado, devido à capacidade de prevenir a perda de peso corporal em pacientes com insuficiência cardíaca com fração de ejeção reduzida, o bloqueio neuro-hormonal também foi avaliado na caquexia não cardíaca. No entanto, no que diz respeito a outras terapias, como a modulação imunológica e agentes pró-anabolizantes, não há provas convincentes de uma resposta positiva[xref ref-type="bibr" rid="r14"]3[/xref],[xref ref-type="bibr" rid="r16"]5[/xref],[xref ref-type="bibr" rid="r17"]6[/xref] sugerindo que são necessários estudos adicionais antes de podermos efetivamente prevenir e tratar a caquexia associada a diferentes doenças, incluindo cardíacas crônicas e insuficiência renal, câncer e doença pulmonar obstrutiva crônica.[/p][/xmlbody]

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