EDITORIAL

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Welcome to the ICD-10 code for sarcopenia

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Abstract

The new ICD-10-CM (M62.84) code for sarcopenia represents a major step forward in recognizing sarcopenia as a disease. This should lead to an increase in availability of diagnostic tools and the enthusiasm for pharmacological companies to develop drugs for sarcopenia.

Keywords Aging; Sarcopenia; ICD code

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Sarcopenia has come a long way since Irwin Rosenberg first suggested the term to apply to age-related muscle mass.[1] This codified the original report in 1931 by Critchley on loss of muscle mass in the extremities with old age.[2] Extensive work by Baumgartner and his colleagues[3,4] established that low muscle mass defined as lean appendicular mass/height^2 was a good predictor of future outcomes. He also established that obese persons with sarcopenia had worse outcomes than non-obese persons with sarcopenia and obese persons with intact muscle mass.[5] This condition has subsequently been termed sarcopenic obesity.[6–9]

In 2010, the European Working Group on Sarcopenia defined sarcopenia as low muscle mass together with low muscle function (strength or performance).[10] Subsequently, other international groups developed similar definitions for sarcopenia focusing on walking speed or distance walked in 6 min or grip strength in persons with lean muscle mass.[11–13] A number of studies have confirmed the validity of these definitions.[14–20] Finally, it was recently demonstrated that cut-offs for the definitions need to be ethnically sensitive.[21–23] Based on the available literature, it would appear that sarcopenia is present in 5 to 10% of persons 65 years of age or older.[24–26]

This high quality research approach to sarcopenia has led to the recognition of sarcopenia as a disease entity with the awarding of an ICD-10-CM (M62.84) code in September, 2016 (www.prweb.com-prweb13376057). This is an important step similar to the much earlier recognition of osteoporosis as a disease state.[27] This will lead to an accelerated interest in physicians making the diagnosis of sarcopenia and for pharmaceutical companies to accelerate the interest in developing drugs to treat sarcopenia. This research will be helped by there already being a number of biomarkers available for sarcopenia.[28–30] This should also drive an increase in diagnostic tool availability for recognizing sarcopenia.[31]

Sarcopenia is the most important cause of frailty in older persons.[32–36] In addition, there is a close association between sarcopenia and bone loss and hip fracture-osteosarcopenia.[37,38] Sarcopenia has also been found to be a major reason for poor outcomes in persons with diabetes mellitus.[39,40]

SARC-F is a simple screening test for sarcopenia.[41–43] It prospectively identifies decreased walking speed, activities of daily living disability, hospitalization, and mortality.[44–46] It has been shown to correlate well with the available international definitions for sarcopenia.

There are numerous causes of sarcopenia including anorexia,[47] inflammation,[48] hypogonadism,[49] lack of activity,[50] hypovitaminosis D,[51] motoneuron loss,[52,53] insulin resistance,[54] poor blood flow to muscle,[55] mitochondrial dysfunction,[56] and genetic causes.[57]

The established treatment for sarcopenia is resistance exercise.[58–60] It appears that sarcopenia is always responsive to resistance exercise.[61] Supplementation with leucine enriched, essential amino acid can also enhance muscle rejuvenation.[62–65] Vitamin D declines with ageing, and supplementation enhances muscle function when deficient.[66,67]

Testosterone is the drug with the strongest record for increasing muscle mass and improving function.[68–70] Anamorelin improves muscle mass but not strength.[71] A number of other drugs are under development focusing mainly on myostatin and activin-2 receptor inhibitors.[72] Selective androgen receptor molecules (SARMs) have also shown positive effects.[73]

Overall, the availability of an ICD-10 code for those of us who work in the area of muscle wasting disease is a very exciting time.[74] Over the next few years, we can expect major advances in the treatment of older persons with sarcopenia.

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Conflicts of interest

The authors state they have no conflicts of interest regarding this work.

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