

Decreased muscle function in elderly patients with chronic kidney disease

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Abstract

Up till now, there is still discrepancy about muscle function in older adults with chronic kidney disease (CKD). In this study we assessed function of upper limb muscles using Hand grip strength (HGS) measurement by hand dynamometer, and lower limb muscles function using Timed Up and Go test (TUGT) in 73 elderly CKD patients. The study included also 73 healthy participants, as control. The difference between pre dialysis (37patients) and hemodialysis (36 patients) CKD patients, as regards HGS and TGUT was also assessed.

Our results showed significant decline in upper limb muscle function in CKD patients, as evidenced by the significantly lower HGS value in comparison with the participants in the control group (30.1 ± 3.9 kg vs. 34.8 ± 3.2 kg) with p value= 0.008 .Our results showed also significant decline in lower limb muscle function in CKD patients, as evidenced by the significantly prolonged TUGT value in comparison with the participants in the control group (15.5 ± 1.5 sec. vs. 7.8 ± 1.2 sec., $p < 0.001$). Our results revealed significant decrease in HGS, and significant prolongation of TGUT in hemodialysis compared to pre-dialysis CKD patients.

Assessment of muscle function by handgrip strength and timed up and go test may be of value for the nephrologist to better manage CKD.

Speaker Publications:

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2. Foley RN, Wang C, Ishani A, Collins AJ, Murray AM. Kidney Function and sarcopenia in the United States general population: NHANES III. *Am J Nephrol* 2007; 27:279-86.
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[10th International Conference on Geriatrics, Gerontology & Elderly Care](#); Webinar- September 23-24, 2020.

Abstract Citation:

Emam M. Esmayel, Decreased muscle function in elderly patients with chronic kidney disease, *Geriatrics* 2020, 10th International Conference on Geriatrics, Gerontology & Elderly Care; Webinar- September 23-24, 2020 (<https://geriatrics-gerontology.insightconferences.com/speaker/2020/emam-m-esmayel-internal-medicine-department-egypt>)



Biography:

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