

THE MUSCLE HEALTH MONITORING AND MANAGEMENT IN PRIMARY CARE ALGORITHM

SUSPECT

Screen all patients aged ≥ 50 years periodically and use clinical judgement to identify at-risk patients with known risk factors for muscle loss

PRESENTING FEATURES

- >5% weight loss within past 6 months
- >10% weight loss beyond 6 months
- BMI <20 if aged <70 years old
- BMI <22 if aged >70 years old
- Falls or fractures
- Prolonged immobilisation
- Recent hospitalisation
- (Peri) menopause

COMORBIDITIES, e.g.,

- Pre-frailty, frailty
- Osteoporosis, osteopenia
- Cancer
- Respiratory disease
- Cognitive impairment
- Depression
- Obesity
- Cardiovascular disease
- Diabetes
- Chronic kidney disease
- Rheumatic conditions
- Cirrhosis

MEDICATIONS, e.g.,

- Statins
- Sulfonylureas
- Glinides
- SGLT2 inhibitors
- GLP-1 receptor agonists
- Antineoplastic drugs
- Androgen deprivation or endocrine therapy
- Glucocorticoids
- Disease-modifying anti-rheumatic drugs

CLINICAL OBSERVATION

- Weakness
- Visual cues of muscle loss
- Slow walking speed
- Difficulty rising from chair
- Difficulties in ADL
- Fatigue
- Mobility impairment

LIFESTYLE CUES

- Malnutrition or at risk of malnutrition
- Reduced food intake/assimilation
- Prolonged periods of sedentary (sitting) time
- Inactive (not involved in any regular activity)
- Smoking

Address patient's comorbidities and review medications, if identified as a risk factor

Presence of ≥ 1 risk factor, proceed to ASK AND/OR ASSESS according to available resources and/or patient preferences

ASK

INCREASED LIKELIHOOD OF POOR MUSCLE HEALTH*

- SARC-F (Strength, Assistance in walking, Rise from a chair, Climb stairs, and Falls) questionnaire: Score ≥ 2

Consider ASSESS in patients without indicative scores based on clinical judgement

ASSESS

LOW MUSCLE STRENGTH AND/OR PHYSICAL FUNCTION†

Assess at least one:

- Handgrip strength: <37 kg (men), <23 kg (women)
- 5 times sit-to-stand: ≥ 11 seconds
- 3-metre TUG (Timed Up and Go): ≥ 10 seconds

Presence of increased likelihood of poor muscle health, low muscle strength AND/OR low physical function, proceed to MANAGE, otherwise proceed to PREVENT, in collaboration with the patient

PREVENT

PHYSICAL ACTIVITY

- Advise at least twice weekly progressive resistance-based training

NUTRITION

- Educate on the importance of diet quality (protein-enriched diet with adequate caloric intake) using a food-first approach

NUTRITION SUPPORT

- Consider a multi-nutrient, oral nutritional supplement with high-quality protein for those at nutritional risk

MANAGE

PHYSICAL ACTIVITY

- Prescribe at least twice weekly progressive resistance-based training
- Consider referral to an Accredited Exercise Physiologist

NUTRITION

- Counsel on optimising energy and dietary protein intake (1–1.5 g/kg/day)[^] using a food-first approach
- Consider referral to an Accredited Practising Dietitian for individualised therapy

NUTRITION SUPPORT

- Consider a multi-nutrient, oral nutritional supplement with high-quality protein for those at nutritional risk

REVIEW

Muscle health should be reviewed annually or after the occurrence of a major health event (e.g., fall, fracture, hospital admission)