

# What is Frail?

- recent weight loss
- self-reported exhaustion
- poor grip strength
- slow walking speed
- low physical activity

# Systolic vs. Diastolic Heart Failure

- Type of ventricular dysfunction found different between elderly and younger
- Approximately 40% to 50% of elderly patients with heart failure have normal left ventricular systolic function with predominantly diastolic dysfunction

# Cardiac Ischaemia and MI

## ■ Angina and equivalents

- Exertional angina - most common manifestation of myocardial ischemia in young and middle-aged
- In elderly, dyspnea also common
- Asymptomatic, although silent ischemia also frequent - demonstrable by stress testing or Holter monitoring.

# Cardiac Ischaemia and MI

## ■ Acute MI

- 45% of MIs were silent or unrecognized
- percentage increased with the patient's age in males (Framingham)
- Instead of chest pain, elderly patients more commonly complain of dyspnea or have vague symptoms of confusion, abdominal pain, or generalized weakness at the time of acute MI.
- Main cause of death in elderly patients

# Factors that contribute to the atypical presentation of infection in the elderly

- *Underreporting of illness*
- *Compromised cognition*
- *Coexisting diseases mask*
- *Altered physiologic responses*

**Table 4** Association of frailty criteria with development of new-onset dependence in activities of daily living

Frailty criteria		Incidence rate of dependency (per 100 person-years)	Unadjusted hazard ratio (95% confidence interval)	Adjusted hazard ratio* (95% confidence interval)
Number				
0		7.7	1.0	1.0
1		11.7	1.54 (0.96–2.48)	1.33 (0.82–2.16)
2		16.7	2.21 (1.40–3.49)†	1.62 (1.00–2.60)†
3		25.2	3.40 (2.12–5.45)†	2.23 (1.34–3.71)†
4–5		37.9	5.18 (3.09–8.67)†	2.38 (1.33–4.25)†
Specific criteria				
Shrinking	No	13.3	1.0	1.0
	Yes	27.9	2.15 (1.65–2.80)†	1.60 (1.20–2.12)†
Weakness	No	12.8	1.0	1.0
	Yes	18.7	1.47 (1.14–1.88)†	1.06 (0.81–1.39)
Slowness	No	8.6	1.0	1.0
	Yes	20.6	2.45 (1.83–3.28)†	1.96 (1.43–2.70)†
Low physical activity	No	12.0	1.0	1.0
	Yes	23.1	1.95 (1.54–2.48)†	1.44 (1.12–1.87)†
Exhaustion	No	15.5	1.0	1.0
	Yes	19.5	1.26 (0.94–1.70)	0.94 (0.67–1.31)

\*Adjusted for age, race, education, self-reported health status, baseline difficulty with  $\geq 1$  activities of daily living, baseline difficulty walking one-quarter mile or up 10 steps, presence of  $\geq 4$  chronic conditions, Mini-Mental State Examination score, Geriatric Depression Scale score, and hospitalization.

† $P$  value  $< .05$ .