Increased Coagulation With Aging: Importance of Homocysteine and Vitamin B12

Spence JD. *Circ J*. 2017; 81(2): 268.

- Approximately 20% of elderly patients have B12 deficiency, and it is more common in patients with cardiovascular disease (CVD) e.g., atrial fibrillation, deep vein thrombosis.
- The marked decline in renal function with age combined with increased prevalence of metabolic B12 deficiency, results in high levels of homocysteine in 40% of patients aged 80 ≥ years.
- All patients with atrial fibrillation should have their serum B12 and homocysteine levels measured. If B12 deficiency is detected, they **should be treated with methylcobalamin instead of cyanocobalamin**, since cyanide (as thiocyanate) from cyanocobalamin impairs renal function.

All patients with CVD should have their serum B12 and homocysteine levels measured, and if they have B12 deficiency, they should be treated with methylcobalamin.