Influence of age, ethnicity and life span issues in abnormal thrombosis

There is a direct relationship between unusual thrombotic episodes and deficient natural anticoagulants. Thrombotic episodes are the result of a genetic and environmental factors as well as an imbalance between procoagulant and anticoagulant factors. Such imbalance cause either hemophilia or thrombophilia. Thrombophilia is precipitated by various causes, predominantly genetic factors. Deficiency of Protein C (PC) and Protein S (PS) is the principal etiopathology for this anomaly (Hernandez, Zamora, 2016). The prevalence of PS deficiency among Caucasians is 0.03%-0.13% whereas as it is 1-2% in Asian population. The common hereditary type of thrombophilia seen in Caucasian population is Factor V Leiden and Prothrombin mutation that are not common in Asians. Whereas, deficiencies related to natural anticoagulants are higher in Asians (Satpanich & Rojnuckarin, 2019). Among Asians, the Japanese have a higher incidence related to a special gene mutation called PS Tokushima manifested as a qualitative PS deficiency. In addition to the race and ethnicity, age and gender also influence PS levels. PS if found high as the age advances, and PS level is relatively high in males compared to females. During the third trimester of pregnancy, there is a transient reduction in PS (Caroll et al, 2017). Abnormal venous or arterial thrombosis found in unusual sites in relatively young may be due the Protein C and S deficiency. Such thrombotic episodes cause morbidity and mortality and therefore it is important for to understand the anomaly. The significance of Protein S (PS), Protein C (PC) and other factors will be introduced through discussion of multiple cases. Natural anticoagulants’ deficiency, types, normal levels, lab diagnosis, thrombosis management, prevention and long-term care will be included in the presentation.

Biography

Elizabeth Simon, R.N., A.N.P.-B.C., Ph.D., is a professor of nursing. Prior to coming to NYIT in 2018, she was a professor of nursing and dean of the School of Nursing at Nyack College. She also previously served as faculty and post-master’s nursing education coordinator at Hunter-Bellevue School Nursing at Hunter College and as a critical care nursing consultant for Corporate Nursing Services of NYC Health and Hospitals Corporation (NYCHHC).

Simon has more than 25 years of nursing education experience and more than 30 years of clinical experience. She is a board certified adult health nurse practitioner who has authored, reviewed, or edited books on critical care nursing; book chapters on transcultural issues; and a book on non-communicable diseases. She has published several articles in peer reviewed journals and periodicals and has presented at various national and international forums. Simon’s academic degrees include B.Sc. (N.) from the College of Nursing, Christian Medical College, Ludhiana, Punjab University, India; M.S. in Critical Care Nursing from School of Nursing, Columbia University; Ed.M. in Nursing Education from Teachers College; M.S. in Adult Health Nurse Practitioner from Hunter College; and Ph.D. in higher education from Walden University. A specialist in nursing education, Simon was a Fulbright Scholar in India, where she taught critical care nursing during the 2015-16 academic year.