Venepuncture and cannulation are among the most widely performed invasive procedures in health care today; yet little attention has been paid to the effects increasing age has on our venous systems and the challenges this creates for the health care professional, as well as the discomfort and potentially distressing experience for the patient (Powers, 1999; Schelper, 2003; Dougherty, 2008; Gabriel, 2011). A review of the literature has identified that there has been little published work in the area of the effects of ageing on the patient’s venous system. The aim of this paper is to increase awareness, with the overall objective of improving the quality of patient care.