

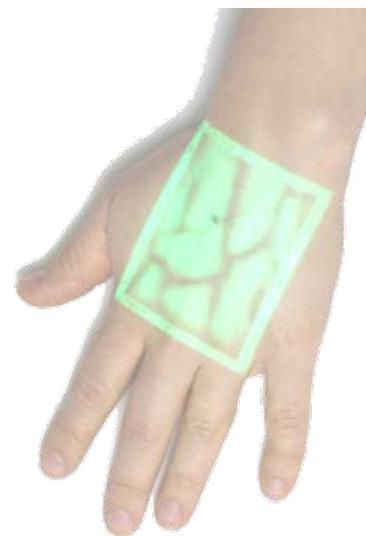


**Using VeinViewer[®] Vision in Decision
Making for Vascular Access
Evaluation at The Royal Marsden**

Using VeinViewer® Vision in Decision Making for Vascular Access at The Royal Marsden

Introduction

Poor venous access is an issue for many cancer patients. Patient's limited options for vascular access often times result in multiple attempts at cannulation causing distress for the staff and patient. If intravascular (IV) access cannot be achieved peripherally, the patient may have to undergo central venous access, which may lead to further complications and is both more invasive and expensive. Understanding these challenges in their patient population, the nursing staff of Medical Day Unit (MDU) London and the IV team/MDU Sutton were interested in evaluating a technology that would allow them to make more informed decisions on vein selection and increase vascular access proficiency in the cancer patient population at The Royal Marsden. The Royal Marsden is a world-leading cancer center specializing in diagnosis, treatment, care, education and research, based in London and Sutton, England, United Kingdom. The technology assessed was the Christie Medical Holdings, Inc. VeinViewer® Vision.



Device Description

VeinViewer® Vision is designed to improve vascular access treatment standards and provide the highest possible quality in patient care. The device is a non-invasive electronic visual aid device designed to project an image of superficial, subcutaneous vascular structures on the surface of the skin. VeinViewer's primary purpose is to assist in vascular visualization for IV starts and blood draws. Being the first and only device to use harmless near-infrared light and patented technologies to project a digital image of patient vasculature directly onto the surface of the skin in real time, VeinViewer Vision provides a venous "road map" to complement the clinician's tactile techniques for peripheral IV insertion and blood draws. VeinViewer Vision is a portable device that can be easily wheeled to various treatment areas throughout a facility. The head is mounted on a 6 axis joint and a articulating arm allowing for optimal positioning over the IV insertion area. The head and arm remain stationary once positioned enabling Eyes On Patient™ hands-free utilization during the venipuncture procedure.

Clinical Evaluation

VeinViewer® Vision was evaluated for two weeks at each of the two locations in the chemotherapy units. Nursing staff were asked to use VeinViewer to help with pre-assessment of the veins and during the vascular access procedure. At the end of their nursing shifts, the

nursing staff members were asked to complete surveys pertaining to the use of the device in comparison to standard technique. The total number of surveys completed during the evaluation period was 23. There was limited training of the device, but the staff unanimously felt that the device was easy to operate. 87% (n=20) of the nursing staff members completing the survey were able to gain access on the first attempt using VeinViewer and/or standard technique. Over half (65%, n=15), of the staff felt that the device improved their success of vascular access and 65% felt that the device provided better options and more options for access. When evaluating the device for providing different access points, it was reported that staff did alter their decision for the location of cannula insertion based on the use of VeinViewer, such as being able to identify where a valve was located.

Staff members who had previous experience with a similar, competitive product were also asked to compare VeinViewer to the competitive device for preference. Overall, seven (7) staff with previous competitive experience responded, and all preferred to use VeinViewer Vision (7) over the competitive product (0).

Conclusion

Based on this evaluation by the nursing staff at the The Royal Marsden in London, England, it can be concluded that VeinViewer Vision did alter the decision making process for vascular assessment and access. The nursing staff members were able to see more viable options and avoid valves during cannulation. Even with limited use, the nursing staff felt that the device assisted in achieving better first time success. VeinViewer Vision was shown to be a valuable device for vascular assessment and access providing benefits to the patient, nursing staff, and healthcare facility.