Case Study: The Use of Hydrofera Blue[™] on a Brown Recluse Spider Bite Wound

Jeanne Alvarez, FNP, CWS Independent Medical Associates, Bangor, ME

History of Present Illness:

This wound was present on C.K. a 38 year old female who was living in another state at the time of the Brown Recluse Spider bite. The type of spider was confirmed according to the mother of the patient who killed and brought the spider to the hospital with the patient. Within 24 hours of the bite the patient developed a painful necrotic ulceration. She was placed on antibiotics, prednisone and analgesics but the wound continued to worsen and she was surgically debrided multiple times at the hospital. She had been tried on multiple types of dressings and treatments while in the hospital. The wound improved before she was transferred to Maine but a tunnel wound remained and had not changed in months. My first contact with the patient was 22 months after the initial spider bite.

Past Medical History:

This patient has severe mental retardation with aphasia. She has a seizure disorder, GERD, dysphagia, history of aspiration pneumonia, gi bleed, anemia, pleural effusions, hypokalemia, mitral regurgitation, osteoporosis, depression, and malnutrition. She has had an appendectomy, hysterectomy and cholecystectomy. She is at times combative.

Medications:

Current medications for this patient include, lasix 20mg daily, raglan 5mg three times a day, ferrous sulfate 325mg three times a day, primidone 250mg two times a day, lamictal 250mg two times a day, zonegran 100mg two times a day, colace 100mg two times a day, vitamin D 400iu daily, tums ES 1000mg daily, multivitamin daily, Tylenol 650mg three times a day, risperadol 1mg twice daily, risperadol 0.5mg 2 extra doses daily as needed for agitation, dilantin 100mg in AM and noon, dilantin 75mg at night.

Allergies:

She is allergic to tegretol and haldol. She has no allergies to foods or latex.

Case Study:

Initial evaluation of the patient was completed on 6-9-04, where she was found to have a tunnel type wound that remained red and painful to the touch, as evidenced by her grimacing and moaning. They had been using iodoform gauze prior to my evaluation. The left hip wound measured 0.8 x 0.5 x 4.0cm with significant erythema and crepitus to the periwound area. An area of 6cm diameter surrounding the wound was found to be very hard when palpated. Given the fact the wound had been present for 18 months and she had had an array of advanced wound products tried, I decided to try Hydrofera Blue tunnel packing for this wound. My goals for the treatment were to close the wound but also to reduce or relieve the pain in the area, although assessing her pain level would be problematic.



Recluse Spider Bite

One week later, the wound measured 0.8 x 0.5 x 3.8cm and there was less agitation on the patient's behalf when I palpated the wound and changed the dressing. The area of tissue hardness remained.



Two weeks after starting the Hydrofera Blue, the wound measured 0.6 x 0.4 x 3.0cm, the surrounding tissue was more pliable and there appeared to be no pain while changing the dressing.

On 6-27-04, she was sent to the hospital for recurrent seizures and pneumonia and was admitted for 17 days. At the hospital they continued to use the Hydrofera Blue dressing changing it every 3 days and PRN. I was contacted by the hospital nursing staff while she was an inpatient and asked what to do when they were no longer able to insert the tunnel dressing into the wound since the diameter of the wound was smaller that the material. I advised them to use a 4 x 4 dressing and cut a small piece off of it to insert into the wound and to continue to change it every 3 days.

Re-consultation was completed upon her return from the hospital. The wound measured $0.2 \times 0.1 \times 0.3$ cm a significant improvement since starting the treatment with the Hydrofera Blue. The area of erythema and crepitus had resolved. The surrounding tissue felt soft and supple like normal tissue should.

This wound closed in 42 days of starting the Hydrofera Blue. Within the first week of use, staff stated they believed she experienced less pain while enduring dressing changes. Unfortunately, there was no picture taken at closure.