Case report #22:
This 36 yr old morbidly obese diabetic female patient originally presented with multiple incisional hernia in 2008. Hernias were treated with a succession of mesh products commencing with a non-biologic before progressing to a biologic mesh in Sept. 2009. Several weeks later in October 2009 a procedure was performed to remove a dermal collagen mesh that the patient had become infected. The patient was left with a large 28 x 23 cm open abdominal wound. VAC Therapy (KCI, San Antonio TX) was used to promote granulation of the wound bed for 8 weeks prior to a decision was made to achieve wound closure using the DermaClose Continuous External Tissue Expander device (Wound Care Technologies Inc. Chanhassen MN). The wound was immediately debrided and a partial closure was accomplished by placing a number of interrupted sutures to close the peripherally perforated portion of the wound. The tension controller was seated on the ‘Home Anchor’ and tension was applied to the tension line by rotating the knob until an audible clicking sound indicated that the predetermined force of 1200 grams was achieved. The wound had reduced in size intra-operatively to 10 x 22 cm. The wound margins were easily undermined and debrided and a non-adherent dressing was placed over the granular wound bed. The patient was brought to the OR and anesthetized before the wound was thoroughly debrided. The wound margins were excised and undermined. Two DermaClose kits were utilized and ten skin anchors were placed along the superior wound margin working from the center laterally towards the wound edges. Each anchor was placed approximately 1cm from the wound edge with equal spacing between the anchors. An additional ten skin anchors were inserted along the inferior margin of the wound, each one positioned opposite a corresponding skin anchor on the superior margin. An additional ten skin anchors were inserted along the inferior margin of the wound, each one positioned opposite a corresponding skin anchor on the superior margin of the wound. The wound had reduced in size intra-operatively to 10 x 22 cm. The wound margins were easily undermined and debrided and a non-adherent dressing was placed over the granular wound bed. The patient was brought to the OR and anesthetized before the wound was thoroughly debrided. The wound margins were excised and undermined. Two DermaClose kits were utilized and ten skin anchors were placed along the superior wound margin working from the center laterally towards the wound edges. Each anchor was placed approximately 1cm from the wound edge with equal spacing between the anchors. An additional ten skin anchors were inserted along the inferior margin of the wound, each one positioned opposite a corresponding skin anchor on the superior margin of the wound. The wound had reduced in size intra-operatively to 10 x 22 cm. The wound margins were easily undermined and debrided and a non-adherent dressing was placed over the granular wound bed. The patient was brought to the OR and anesthetized before the wound was thoroughly debrided. The wound margins were excised and undermined. Two DermaClose kits were utilized and ten skin anchors were placed along the superior wound margin working from the center laterally towards the wound edges. Each anchor was placed approximately 1cm from the wound edge with equal spacing between the anchors. An additional ten skin anchors were inserted along the inferior margin of the wound, each one positioned opposite a corresponding skin anchor on the superior margin of the wound. The wound had reduced in size intra-operatively to 10 x 22 cm. The wound margins were easily undermined and debrided and a non-adherent dressing was placed over the granular wound bed. The patient was brought to the OR and anesthetized before the wound was thoroughly debrided. The wound margins were excised and undermine...
The wound was irrigated and the two DermaClose devices were re-applied and locked in order to provide dynamic tension. Additional sutures were placed at the lateral edges [Fig 4]. The dressing was removed at 36 hours [Fig 5] the wound had now reduced to 3 x 6 cm in size. Both the DermaClose devices were removed by unlocking the tension controller and releasing the tension line. The skin anchors were removed using a skin staple remover. A single DermaClose device was applied to the wound [Fig 6] additional sutures were placed at the lateral edges and the wound was dressed in the usual fashion. After 4 Days, the patient returned to the OR and the wound had reduced in size [Fig 7] so that it was possible to suture the remaining wound closed [Fig 8]. Four month follow up. The patient returned in March 2010 for follow up. In that time a small wound of unknown origin had formed below the previously closed wound [Fig 9].