

# **CASE STUDY: Neck Pain**

**DOA:** 08/06/2012

**DATE OF PROCEDURE:** 1/11/2013

## **DIAGNOSIS, PERTINENT HISTORY AND PHYSICAL FINDINGS:**

1. **Clinical History and Physical Findings:** Ms. Kwak was evaluated by me for her injuries sustained in a motor vehicle accident. Patient stated that before the date of the accident she did not experience the same pain and was in generally good health. Ms. Kwak has undergone physical therapy and is still complaining of headache, tenderness and moderate to severe pain located on both sides of her neck. Her range of motion is limited due to these symptoms and is not relieved for any significant period of time with conservative treatment. Examination of the cervical spine showed loss of the normal lordosis. Spasm and stiffness were noted on palpation of the paravertebral muscles. Trigger points were elicited at C2, C3, C4, C5, C6 and C7 levels. The patient had difficulties looking up to the ceiling because of spasm and stiffness of the cervical musculature. It is therefore indicated at this time for Ms. Kwak to undergo trigger point injections to the bilateral trapezius and posterior occipitalis.
2. **Diagnosis:** Posttraumatic bilateral neck pain with trigger points noted on the bilateral trapezius and posterior occipitalis.

## **SIZE, LOCATION AND NUMBER OF TRIGGER POINTS OR PROCEDURES WHERE APPROPRIATE:**

1. **Size:** 0.2 cm to 0.5 cm
2. **Location:** Neck
3. **Number of Trigger Points:** 4

## **A COMPLETE DESCRIPTION OF THE MAJOR SURGICAL PROCEDURE AND THE SUPPLEMENTARY PROCEDURES:**

Patient explained the risks and benefits of the procedure. Patient situated in the seated position. Landmarks were identified and mapped out. The patient was prepared using ethyl chloride spray and alcohol. The skin and soft tissues were infiltrated bilaterally. A total of 2 ml of 1% lidocaine was injected into bilateral trapezius and posterior occipitalis in divided doses. The examination

is performed with a 7.5 Mhz linear array probe. Each injection site was then massaged using gentle pressure and then stretching of the affected region had been performed. The patient tolerated the procedure well with good pain relief with no evidence of bleeding. There were no parasthesias or any complaints reported by the patient. The patient was discharged home awake, alert and oriented. The patient was given an appointment to follow up in 2 weeks if symptoms persisted and notify the office immediately if signs of bleeding or discomfort arise.

**Specific Muscles Injected:** Right trapezius, left trapezius, right posterior occipitalis and left posterior occipitalis.

An ultrasound-guided trigger point injections technique with a 7.5 mHz liner array probe helps confirm accurate needle placement. This could help to avoid injection's into adipose tissue which may minimize the injection's effectiveness. The ultrasound guidance also could help to avoid the potential complication of a pneumothorax or inadvertent intrathecal injection.

#### **ESTIMATED FOLLOW UP POST PROCEDURE:**

1. Ms. Kwak was advised to return for a follow up evaluation within 1-2 weeks and notify the office immediately if signs of bleeding, adverse reactions or discomfort arise.

#### **OPERATIVE TIME:**

1. **Total Time Spent:** 30 minutes.