INTRODUCTION
Thyroidectomy, whether by conventional incision or more recently via minimally invasive techniques, is being performed more commonly. There have been described numerous locations and methods of marking out in thyroidectomy (and parathyroidectomy) incision. These descriptions include:

- Two fingerbreadths above the sternal notch.
- Midway between the sternal notch and thyroid notch of the thyroid cartilage.
- One cm caudal to the cricoid cartilage.

Regardless of the incision advocated, it should be located for maximal access to the thyroid gland and also provide good cosmesis. A number of publications have advocated marking the patient, preoperatively, with the patient seated in an upright position. However, this does not take into account the “hustle and bustle” in the preoperative area which might prove to be a distraction in properly marking the patient. Also, there may be erasure of the marking as the patient is being prepped for surgery.

The purpose of this communication is to describe an alternative method of marking out a thyroidectomy / parathyroidectomy incision using reliable bony landmarks. Once the patient is intubated, this method allows for maximal location of the incision, based on the characteristics of each individual patient (size of nodule, superior or inferior pole pathology, and body habitus).

METHODS AND MATERIALS

The surgeries were performed by a single surgeon in a community hospital setting. After each patient was intubated, the neck was hyper extended and a shoulder roll placed. After the patient is prepped and draped; the midline is marked at the sternal notch. Each clavicle is then marked in centimeter long increments, as measured from the midline (Figure 1). Each clavicle is marked out for a distance of 10 to 15 centimeters on each side. An incision is then marked out, connecting the dots from each clavicle across the central part of the neck. The further lateral the connecting dots the higher the incision in the neck. The incision can generally be incorporated into a natural skin crease. The incision is generally cm long, lying between the medial aspect of the sternocleidomastoid muscle to the thyroid notch of the thyroid cartilage.

There were 65 patients in the current series. Sixty one of the patients undergoing thyroidectomy and the remaining five undergoing parathyroidectomy. There was one patient in the series that had both a follicular cancer and concurrent parathyroid adenoma. The time of follow-up is currently up to three years.

After the surgical procedure is completed the soft tissues are closed with interrupted Vicryl sutures. The skin margins are re-approximated with an absorbable subcuticular suture. Postoperatively, the patients are seen at one week, three months, six months, and one year post-surgery.

RESULTS

This method of marking out a skin incision, using bony anatomical landmarks, allowed for the skin incisions to be placed at an appropriate level in the neck for each patient. The resulting scars healed well and were symmetric.

There was no postoperative infection noted in any case nor has there been any keloid scar formation noted on follow-up exams. Patient and surgeon satisfaction with incision placement has been good.

REFERENCES


CONCLUSIONS

A novel method of marking out incision for thyroidectomy/parathyroidectomy is described using bony anatomical landmarks. The incision is easily reproducible from patient-to-patient and results in a symmetrical, aesthetically pleasing scar.