

# SESLHD GUIDELINE COVER SHEET



<b>NAME OF DOCUMENT</b>	Nursing Observation for Total and Completion Thyroidectomy
<b>TYPE OF DOCUMENT</b>	GUIDELINE
<b>DOCUMENT NUMBER</b>	SESLHDGL/046
<b>DATE OF PUBLICATION</b>	November 2016
<b>RISK RATING</b>	Low
<b>LEVEL OF EVIDENCE</b>	NSQHS Standard – 4 – Medication Safety
<b>REVIEW DATE</b>	November 2021
<b>FORMER REFERENCE(S)</b>	Nil
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<b>KEY TERMS</b>	Total Thyroidectomy Completion Thyroidectomy Parathyroidectomy Minimally Invasive Parathyroid Surgery (MIPS) Parathyroid Hormone (PTH)
<b>SUMMARY</b>	Details the role the nurse must undertake in caring for a patient undergoing Thyroid Surgery. Providing information on the postoperative phase.

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## Nursing Observation for Total and Completion Thyroidectomy

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## Section 1 – Background

A clinical guideline is a set of recommendations based on systematic identification and synthesis of the best available scientific evidence to make clear recommendations for the care, health professionals provide ([NHMRC, 2011](#)). It is fundamental that guidelines are based on the best available evidence at the time as agreed by expert stakeholders.

The Total and Completion Thyroidectomy guideline has been created to provide an evidence based reference for managing thyroidectomy patients across SESLHD and to support the Observation Chart in its implementation. The aim of the Guideline is to standardise the role the nurse must undertake in caring for a patient undergoing Thyroid Surgery and provide information on the postoperative phase.

The purpose of the Guideline is as follows:

- Reduce clinical error
- Provide evidence based best practice Guideline
- Limit unwarranted variation in clinical practice
- Improve patient safety
- Provide support for new and transitioning staff regardless if facility
- Provide support to the Post -Operative Thyroidectomy Observation Form.

## Section 2 - Principles

- Thyroidectomies are performed for the management of goitre, tumours or hyperthyroidism
- Provides appropriate nursing care and understanding of the types of thyroid surgery
- This rule applies to inpatients of South Eastern Sydney Local Health District (SESLHD).

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## Section 3 - Definitions

**Thyroidectomy** refers to the surgical removal of the thyroid gland. It is performed for goitre, hyperthyroidism and tumours.

**Parathyroidectomy** refers to the surgical removal of the parathyroid glands.

**Hemithyroidectomy** refers to the surgical removal of one lobe of the thyroid gland.

**Completion Thyroidectomy** refers to the surgical removal of the remaining thyroid tissue after a hemithyroidectomy. This has the same potential complications as a total thyroidectomy.

**Hypocalcaemia** refers to a deficiency of calcium in serum. Mild hypocalcaemia is usually asymptomatic. Severe hypocalcaemia is characterised by hyperparasthesia of the hands, feet, and lips, tetany and cardiac arrhythmias.

**Chvostek's Sign** refers to the twitching or contracture of the facial muscles produced by tapping the facial nerve at a specific point on the face.

**Trousseau's Sign** refers to the carpopedal spasm occurring after a few minutes of inflation of a sphygmomanometer cuff above systolic blood pressure.

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## Section 4 - Responsibilities

**Registered Nurse and Enrolled Nurse** caring for the postoperative Total Thyroidectomy or Completion Thyroidectomy patient.

## Section 5 -

### **POST OPERATIVE CARE – TOTAL THYROIDECTOMY, COMPLETION THYROIDECTOMY and PARATHYROIDECTOMY:**

- Ensure patient is nursed in semi – high fowler's position (> 45°)
- Observe wound on arrival to unit. Check for excessive bleeding, swelling and drain output. Assess patient's voice for stridor, pain. Ensure the neck of the patient is well supported.
- Trousseau's and Chvostek's (T&C) signs to be reviewed 4/24 for up to 72 hours. This management can be changed in accordance with the Surgeon's instructions.  
(NB: T&C's can cease after a Normal Parathyroid Hormone (PTH) has been recorded post-surgery)
- Patient to have free fluid diet for the first night, then diet as tolerated
- Pain is assessed as per the Prince of Wales Hospital Pain Assessment and Management Guidelines
- Analgesia is prescribed and administered as charted or PRN as required
- Drain to be monitored, emptied and recorded appropriately on the SESLHD Fluid Balance Chart.

### **POST OPERATIVE CARE – MINIMALLY INVASIVE PARATHYROIDECTOMY SURGERY (MIPS)**

- Ensure patient is nursed in semi – high fowler's position (>45°)
- Observe wound on arrival to unit. Check for excessive bleeding, swelling and drain output. Assess patient's voice for stridor, pain. Ensure the neck of the patient is well supported.
- Pain is assessed as per the Prince of Wales Hospital Pain Assessment and Management Guidelines
- Patient to have free fluid diet for the first night, then diet as tolerated
- Analgesia is prescribed and administered as charted or PRN as required
- Usually a Day Only Surgery. PTH and Calcium levels should be checked two hours post-surgery. If within normal range, patient would be suitable for discharge home
- Patient to be provided with instructions when to commence Calcium / Vitamin D supplement in the event of developing symptoms.

### **POST OPERATIVE CARE – HEMITHYROIDECTOMY:**

- Ensure patient is nursed in semi – high fowler's position (> 45°)
- Observe wound on arrival to unit. Check for excessive bleeding, swelling and drain output. Assess patient's voice for stridor, pain. Ensure the neck of the patient is well supported.
- Patient to have free fluid or soft diet for the first night, then diet as tolerated
- Pain is assessed as per the Prince of Wales Hospital Pain Assessment and Management Guidelines
- Analgesia is prescribed and administered as charted or PRN as required
- Drain to be monitored, emptied and recorded appropriately on the SESLHD Fluid Balance Chart.

## Section 6 -

### OBSERVATIONS:

Observation	Frequency	Duration
T'S and C's (Total Thyroidectomy Only)	4 <sup>th</sup> hourly	Cease once PTH Level is Normal
Airway Management	2 <sup>nd</sup> hourly	72 Hours
Wound Management	2 <sup>nd</sup> hourly	72 Hours
Oxygen Saturations	Hourly for 4 hours	Then 4/24 (stable)
Respiratory Rate	Hourly for 4 hours	Then 4/24 (stable)
Temperature	Hourly for 4 hours	Then 4/24 (stable)

- Hypocalcaemia symptoms are usually manifested 24 to 72 hours after thyroid surgery
- Monitor airway of patient for any stridor, change in vocalisation, especially in the first 24 hours
- Monitor drain site for excess bleeding, swelling and / or haematoma.

**NB: Inform Medical Officer if noticeable changes occur in the aforementioned observations.**

### NUTRITION:

- Patient to have free fluid diet for the first evening. Then progress patient to diet as tolerated from the next morning, as patients can experience difficulty in swallowing and eating due to pain and swelling after the procedure.

### WOUND CARE:

- Monitor surgical site for excessive bleeding through dressing and also via surgical drain
- Observe for swelling. This can be an indicator for internal bleeding or haematoma.



## Section 7 –

### EMERGENCY EQUIPMENT

- Clip or Staple Removers
- Combines
- Gauze.

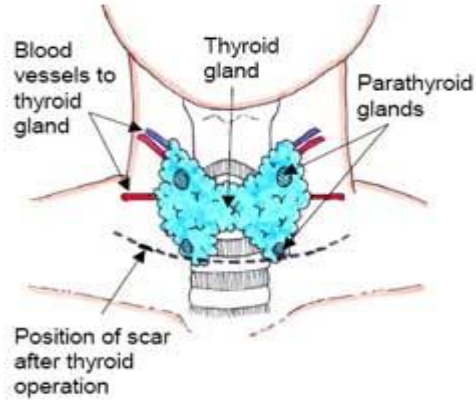
**NB: Calcium Gluconate is utilised in the event of severe hypocalcaemia. It is initiated by a Medical Officer.**

### VARIANCES

Thyroid storm (which is extremely rare), occurs after surgical manipulation of the gland which has been subjected to stress and/or previously controlled by medication prior to surgery. Intra-operatively, the patient will display signs of tachycardia and an increase in temperature. Postoperatively, the patient may become agitated, disorientated and also have frequent watery stools. If not treated, patients with thyroid storm may progress to coma and death. It is important to notify the surgical team immediately if any of these symptoms are present.

**Under SESLHD PACE Criteria: Code Blue is activated.  
St George Hospital only: PACE Tier 2 is activated.**

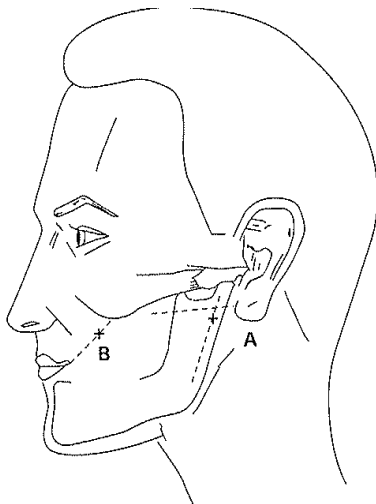
## Section 8 –



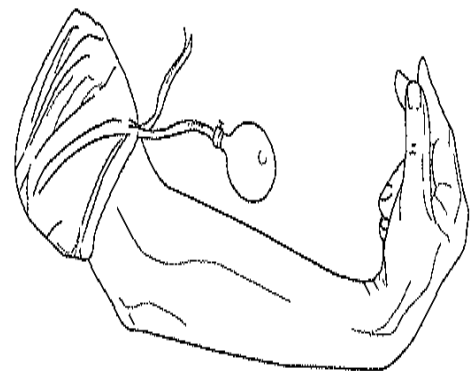
### The Thyroid Glands

#### Chvostek's Sign<sup>2</sup>

Tap in front of ear lobe



#### Trousseau's Sign<sup>2</sup>



## Section 9 –

### Documentation

- Prince of Wales Hospital Trousseau and Chvostek’s Chart (Form No: SES110046)
- SESLHD Fluid Balance Chart
- SESLHD Health Care Record (Continuation Notes). Detailed documentation needs to be provided by the nurse caring for a post-operative thyroidectomy patient regarding general observations and also including: wound observation, wound drainage, Trousseau and Chvostek’s signs, voicing of patient.

### References

#### External References

1	Litwack-Saleh, K. (1992). Practical Points in the care of the patient post-thyroid surgery. <i>Journal of Post Anaesthesia Nursing</i> , 7, 404 – 406.	
2	Urbano, FL. (2000). Signs of Hypocalcaemia: Chvostek’s and Trousseau’s Signs. <i>Hospital Physician</i> , 43 – 45.	
3	Mosbys (1998). Medical, Nursing and Allied Health Dictionary. St. Louis, Missouri.	
4	<a href="http://www.bmihealthcare.co.uk/treatment/treatmentsdetail?p_name=Thyroidectomy%20(for%20Goitre)&amp;p_treatment_id=355">http://www.bmihealthcare.co.uk/treatment/treatmentsdetail?p_name=Thyroidectomy%20(for%20Goitre)&amp;p_treatment_id=355</a>	
5	<i>Consensus Statement from Andrew Parasyn(Consultant Surgeon) and Professor Phil Crowe(Department Head – General Surgery) Prince of Wales Hospital - in relation to Completion Thyroidectomy, Nutrition and Variances. April 2012</i>	

#### Internal References

[SESLHDPR/336 - Documentation in the Health Care Record](#)  
[NSW Ministry of Health Policy - PD2007\\_036 Infection Control Policy](#)

#### SESLHD: PACE Policy

[SESLHDPR/283 - Patient with Acute Condition for Escalation \(PACE\): Management of the Deteriorating ADULT and MATERNITY Inpatient](#)

Clinical Business Rule – Pain Assessment and Measurement Guidelines – Prince of Wales Hospital and Community Health Services

## Revision and Approval History

Date	Revision no:	Author and approval
March 2016	1	Helen Cox – CNC Acute Surgery - POW Janine Bothe- CNC- Acute Surgery – SGH
April 2016	1	Draft for Comment – endorsed by Executive Sponsor
May 2016	1	Helen Cox – CNC Acute Surgery POWH Janine Bothe – CNC Surgery STG
October 2016	1	Endorsed by SESLHD Clinical and Quality Council
November 2016	1	Published



 <b>Health</b> South Eastern Sydney Local Health District	Facility:	FAMILY NAME	MRN
		GIVEN NAMES	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
<b>OBSERVATIONS FOR TOTAL AND COMPLETION THYROIDECTOMY</b>		D.O.B. ____ / ____ / ____	M.O.
		ADDRESS	
		LOCATION / WARD	
		COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE	

**Trousseau's Sign:** A carpedal spasm occurring after a few minutes of inflation of a sphygmomanometer cuff above systolic blood pressure (see diagram 1. below)


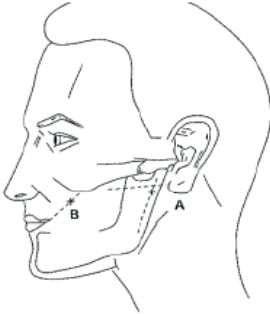
**Chvostek's Sign:** Twitching and/or contracture of the facial muscles produced by tapping on the facial nerve at a specific point on the face (see diagram 2. below)

**Dyspnoea:** Record and report any respiratory effort or distress eg stridor. **NB: changes in voice may indicate threatened airway. Call Code Blue if patient's condition is immediately life threatening**

**Voice:** Record and report changes in voice quality / integrity eg hoarse, absent. **NB: changes in voice may indicate threatened airway. Call Code Blue if patient's condition is immediately life threatening**

**Wound Site:** D=Dry, S=Soiled, I=Intact, H=Haematoma \*wound management plan should be documented on **SESIAHS** wound management chart

**Drain Output Type:** H/S=Haemoserous, S=Serous, F=Frank blood, N=Nil \*\*volume of drain output should be documented on **SESIAHS** daily fluid balance chart

<p><b>Testing for a positive Trousseau's Sign:</b></p> <p>Inflate sphygmomanometer cuff above systolic pressure then wait several minutes.</p> <p>Occlusion of the brachial artery causes flexion of the wrist and metacarpophalangeal joints, hyperextension of fingers, and flexion of the thumb on the palm.</p>	 <p><b>Diagram 1.</b></p>	<p><b>Testing for a positive Chvostek's Sign:</b></p> <p>Tap 0.5cm-1cm below the zygomatic process of the temporal bone, 2cm anterior to the ear lobe, and on a line with the angle of the mandible (see point A on the diagram).</p> <p>Twitching may involve any or all of the facial nerve on that side, including circumoral muscles and the orbicularis oculi.</p>	 <p><b>Diagram 2.</b></p>
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