

CHEST DRAIN OBSERVATION PROTOCOL

The management of a patient with a chest tube attached to a UWSD system includes regular assessment through observation of the patient and the system. The observations to be taken and recorded on the Thoracic ICC Observation Chart are listed below:

1. **Basic Vital Signs:** Temperature, Pulse, Respiration, Blood Pressure and Oxygen Sats – 4/24. Assess for the presence of dyspnoea or cyanosis.
2. **UWSD System:**

		Code
Swing	the presence of fluctuations (swinging/ tidalling) of fluid in the water seal chamber as the patient breathes (fluctuation of 4-8 cms reflect changes in pressure in the pleural space)	Y = Yes N = No
Air loss	seen as bubbling in the water seal chamber of the UWSD system either continuously or intermittently. If bubbling is absent ask the patient to take a deep breath and cough as this expels air in the pleural space by increasing pleural pressure	C = continuous OC = on cough N = none
Drainage	record and notify medical officer of any large differences in the amount or colour of drainage	Amount in mls
Suction Pressure	the amount of suction pressure, if ordered. Check the suction gauge setting against prescribed level of suction (a gentle, continuous bubbling should be seen in the suction control chamber in a 3 chamber system)	Amount in Kpa or cms of water N = none
Connections	ensure all connections are tight and that the tubing is kept above the chamber in a relatively straight position. The system should be approximately 80-100 cms below the level of the patient's chest	S = secure
Fluid Levels	the water levels in the water seal and suction control chambers and replenish as necessary (fluid can evaporate from these chambers)	C = correct
Wound	the drain dressing – to be done daily. Note the condition of the wound, volume of exudate and palpate under and around the chest tube for the presence of crepitus under the skin (subcutaneous emphysema) indicating an air leak into the subcutaneous tissue. Check that the securing tape is supporting the weight of the tube	Intact
Pain	Observe and record the patient's pain level at rest and with deep breathing and coughing using the numerical pain scale	Score 0-10