ACCIDENT PATIENT WALKS INTO ED														C-SPINE CLEARED AND
ON ب	SITE					AMBULANCE			EMERGENCY DEPARTMENT					COLLAR REMOVED
	MANUAL IN-LINE STABILISATION	CERVICAL COLLAR FETCHED & APPLIED	EXTRICATION (RTC)	PATIENT MOVED ONTO SPINAL BOARD/SCOOP	HEAD BLOCKS	LOAD INTO AMBULANCE	TRANSPORT TO HOSPITAL ED	HANDOVER TO ED STAFF	TRANSFER ONTO TROLLEY	EXAMINATION BY NURSE / DOCTOR	WAIT	RADIOLOGY	DIAGNOSIS	SOFT TISSUE DAMAGE
Description	The paramedics will always attempt to place the head in neutral alignment to alleviate pressure on the spinal cord. If there is any pain, neurological deterioration or resistance to movement the procedure will be abandoned and the neck splinted in the relevant position.	One paramedic will hold the patients head while the other applies a collar. Adjustable collars normally carried in two sizes, adult and paediatric. Laerdal will be carried in 6 sizes.	A KED Extrication device is often used to stabilise the patient during transfer from a vehicle to a stretcher.	are valuable primarily for extrication from vehicles. Patients may also be transferred on a scoop stretcher or vacuum mattress.	The patient will be placed flat on a spinal board and blocks or sandbags held in place with tape to stabilise the patients head.	The patient, still strapped to a spinal board, will be placed on the ambulance bed.			The patient strapped to a spinal board will be placed on a firm trolley. A log roll and initial examination of the back may be performed and the spinal board removed at the same time. Alternatively the patient will be logrolled by 4 to 5 staff onto a slide and moved across. Blocks will be removed temporarily	The clinician will need access to the posterior cervical spine to check for swelling or other abnormalities. Current collars need to be removed temporarily to do this. If the patient has made their own way into A&E a collar may be applied as part of triage?	Depending on the condition of the patient he/she may be waiting a long time whilst wearing a collar.			Orthotist decides what collar to put on.
Problems	Airway may need to be cleared.	Difficult to feed collar under neck especially if patient is lying down and hair/clothes get in the way. Sizing - not clear how to identify the right size. Doesn't fit the extreme sizes of patients. Restricted storage in road/air ambulances. Robustness - consider environment, device may get stepped on. Velcro is known for getting stuck in hair or rendered in mud.	Collars may come loose when manoeuvring the patient.	Repeated transfers (log-rolls) to and from the board may compromise spinal protection and induce a significant amount of spinal movement. There might be a problem finding enough people to perform a safe log-roll as you might only have two paramedics. When a scoop is used there is no place for the head blocks to attach.		The paramedic will need to a suction unit and will need	will feel sick after a serious trauma. clear the mouth and airways with d access to the mouth. nade in the front of the windpipe.		during log-roll and examination. Stresses on neck due to movement.	Collars put back on wrong by inexperienced clinician.	Some patients complain that the collar is the only cause of pain. Pressure sores can develop in a relatively short amount of time. Current designs dig into the back of the head and/or the ears.	to read the images if there is a clear indication that the patient is wearing a collar. Collar prevents patient opening mouth for peghole image. A collar removes the natural curve of the cervical spine and could be confused with soft tissue tension. Jewellery, hair clips and other items left on by the ambulance personnel can be a problem requiring temporary removal of		Patient not educated on how to use the collar,
Requirements	ALLOWS FOR ACCESS TO MOUTH	EASY TO APPLY CORRECTLY EASY TO IDENTIFY CORRECT SIZE MUST PASS FIREMAN TEST	MUST ALLOW FOR VENOUS RETURN DBUST TO STORE			NEEDECOMFC	MUST NOT COVER FRONT OF NECK			EASY TO REMOVE ACCESS TO POSTERIOR PART OF NECK WITHOUT NEED FOR REMOVAL OF COLLAR	MUST NOT CAUSE DISCOMFORT TO THE PATIENT	PATIENT NEEDS TO OPEN MOUTH FEATURE THAT SHOWS UP AS A MARKER ON X-RAYS ABILITY TO EASILY REMOVE ITEMS SUCH AS JEWELLERY		FAIL SAFE INSTRUCTIONS OF USE



SPINAL UNIT - TRACTION PATIENT MOVED ON GARDNER-WELLS FORCE APPLIED COLLAR MIGHT BE REMOVED WORN 8-12 WEEKS HALO BRACE in traction for short term

onto a traction bed using

will be used. Pins will be

place a (50N?)force will

Collars must be worn at The patient will be placed on an operating table. The position will depend on the injury and method the position can be suggested as a suggested of the position of the suggested immobilisation while definitive surgery or other forms of a Jordan lifter whilst the registrar will support the skull in either an OR or the pulley system. The halo brace has been used as During this time the Collars normally worn the initial treatment for odontoid patient will be in and all times to avoid further during this step. neurological damage. fractures. out of hospital for treatment are being planned. neck. ICU. of surgery. The patient can be placed in a prone, supine or lateral position. 5 people will be needed for this mangurer.

- mechanical fixation of the cervical spine through use of metal screws and fixtures - pressure relief on the spinal regular check-ups and x-rays, but will try to A "halo" metal ring is secured return to a 'normal' life. to the skull with pins and to for this manouver. two metal rods attached to a well-fitted plastic jacket. With this apparatus, it is possible to obtain complete fixation and Collars will be to arrest almost all movement Pins can come loose and removed to avoid Keeping the neck stable of the cervical spine. Muscles will be weak head fall out of tongs! pressure sores and whilst positioning the and head feel heavy. other discomfort.

SEVERAL WEEKS The main objectives of therapeutic man

Issuing a spare set of pads could enco

improved skin care and allow the patier

use one set of pads while the others are

Getting patients to wear the collar for the amount of time can be challenging. The normally be removed for showers, shave Other reasons patients fail to wear colla prescribed:

poor fit and rubbing against skin difficult to put on/take off

temperature

are to prevent neurological injuries and symptomatic relief.

COLLAR WORN FOR

Collars such as the Aspen or the Philad

Some collars are better suited to skin of personal hygiene than others. For exam Aspen collar has removable pads which washable and available as separate rep