

Secondary Survey

Introduction

The aim of the primary survey is to detect and treat immediately life threatening problems. The secondary survey aims to detect and treat 'everything else'. Therefore the secondary survey should not be started until the primary survey is complete, repeated, and the patient as stable as possible.

Before starting, always ask yourself "is there something more useful I could be doing for this patient?"

Three main elements to the secondary survey:

- Vital signs monitoring
- Top-to-toe survey
- Medical history (AMPLE)

Vital Signs

This involves repeating ABCD, obtaining accurate figures for each component. This should be done and recorded at least every 10-15 minutes on a stable patient, more frequently if there is cause for concern. Some absolute findings are concerning, but usually trends are more useful. Normal values for a typical adult are given in brackets, but you always need to ask yourself if a particular pattern appears normal for that patient, in that situation – actual values vary widely from person to person.

- Airway
 - Patent (Yes)
 - Noise? (Quiet breathing only)
- Breathing
 - Rate/regularity/depth (12-18/min)
- Circulation
 - Pulse rate/strength (carotid/radial) (60-80/min)
 - Capillary refill (<2s/same as first aider)
 - Blood Pressure (>100/60)
- Disability
 - AVPU (A, once woken)
 - Pupils (Equal, reactive to light – PERL)

It is impossible to give rules for every situation, but certain trends and findings are always concerning:

Airway becoming noisy
Breathing becoming more rapid
Pulse increasing in rate/decreasing in strength
Cap. refill increasing
Blood pressure dropping
Level of consciousness below A or dropping
Pupils not equal, or are sluggish, or are unreactive

Top-to-Toe

This is a systematic examination of the patient, looking for evidence of injuries. Generally follow a 'look, listen, feel' approach. Remember that everyone has a top, a bottom, two sides, a front, and a back. Injuries can also hide in corners.

Head

- Wounds – bruising/bleeding
- CSF leaks from ears or nose
- Panda eyes/Battle's sign
- Pupils
- Colour
- Noisy breathing
- Depressed/soft areas of skull

Neck

- Wounds
- Tracheal deviation
- Swelling
- Larynx

Chest

- Symmetrical expansion
- Wounds/bruising
- Deformity
- Paradoxical movement
- Accessory muscles
- Breath sounds, rate, depth
- Tenderness

Abdomen

- Bruising/wounds
- Distension
- Bowel sounds
- Tenderness
- Rigidity/guarding

Pelvis

- Bruising/deformity
- DO NOT PRESS ON OR ROCK THE PELVIS

Back

- Wounds/bruising
- Tenderness

Arms and Legs

- Wounds
- Deformity
- Movement
- Tenderness
- Pulses
- Sensation

Medical History

A detailed history of a medical complaint is beyond the scope of this session and handout. However, for most casualties it's worth asking the following questions and certainly for anyone likely to go to A&E:

- Allergies (especially to any medication)
- Medication (over the counter, prescribed, 'recreational')
- Past Medical History (health problems, previous surgery)
- Last food and drink
- Events leading up to the situation ("How have you been recently?")

Much of this will not effect the first aid management, but can have a huge impact on later care. Remember that seriously ill and injured people can fall unconscious, and so others may not have chance to ask these questions.

Michael Stewart
Michael.stewart@physics.org
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