

## ***BASIC MEDICAL SURVEILLANCE ESSENTIALS FOR PEOPLE WITH DOWN'S SYNDROME.***

### ***CERVICAL SPINE INSTABILITY***

*(One of a set of guidelines drawn up by the Down's Syndrome Medical Interest Group)*

1. People with Down's syndrome have a small risk for acute or chronic neurological problems caused by cervical spine instability<sup>1,2</sup>
2. Currently there is no screening procedure which can predict those at risk. In particular cervical spine X rays in children have no predictive validity for subsequent acute dislocation/ subluxation at the atlantoaxial joint<sup>3,4,5,6,7</sup>
3. Children with Down's syndrome should not be barred from sporting activities because there is no evidence that participation in sports increases the risk of cervical spine injury any more than for the general population<sup>6,8</sup>
4. Although the risk of injury is small, if any child or adult needs an anaesthetic the anaesthetist and recovery room staff must always be reminded of the diagnosis so that appropriate care can be taken to avoid cervical injury whilst manipulating the head and neck in the unconscious subject<sup>9</sup>
5. Although the risk of injury is small, if a person with Down's syndrome is involved in a road traffic accident personnel involved in their care should be alerted to the possibility of cervical spine instability and of the need for particular care relative to this<sup>1,5</sup>
6. If a person with Down's syndrome develops pain behind the ear or elsewhere in the neck, abnormal head posture, torticollis, deterioration of gait, manipulative skills, or bowel and /or bladder control they should be referred immediately to an appropriate specialist (usually a neurologist or a spinal orthopaedic surgeon).

#### **References - Cervical spine instability:**

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8. Cremers,MJG.,Bol,E.,de Roos,F.,van Gijn,J. (1993) *Risk of sports activities in children with Down's syndrome and atlantoaxial instability*. Lancet. **342**: August 28th. 511-514.
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