

The **third to sixth cervical spinous processes** can be felt with slight flexion of the neck. The tip of the spinous process lies at the level of the homologous inferior articular process.

The **first to twelfth thoracic spinous processes** are palpable. The transverse process of T1 can be identified below that of C7, with the remainder being easy to identify individually by placing one finger on the process above while determining that below; between each is a shallow depression. Each spinous process appears pointed except that of **T12**, which is flattened. They pass postero-inferiorly with the tip approximately 3cm below the corresponding transverse process and can be more easily identified with the subject sitting with the spine flexed. The spinous processes of the mid-thoracic spine project further inferiorly than the upper and lower thoracic spinous processes. In the mid-thoracic spine the tips of the spinous processes may project as far as the zygapophyseal joint below (e.g. tip of T6 spinous process lies at the level of the T7/T8 zygapophyseal joint). This is an important consideration when assessing and treating the thoracic spine.

The **first to fifth lumbar spinous processes** may be palpable with the patient lying prone. The interspinous spaces are easily palpable and can be discriminated from the spinous processes during lumbar flexion as the spinous processes move further apart. The smaller L5 spinous process may be difficult to locate.

In the majority of subjects the iliac crests are level with the L4/L5 intervertebral disc space, L4 vertebral body or L5 vertebral body.