Figure 2- The relationship between the lumbar plexus and the psoas muscle; show the lumbar plexus always located in the posterior the third of psoas major muscle in all cross section of lumbar; the lumbar plexus nerve was marked by yellow circle.

a: Cut image at L2; b: Cut image at L3 displays the L1 and L2 nerve roots; c: Cut image at L4; d: Cut image at L5 displays the L4 and L5 nerve roots;

Figure 3 -Three-dimensional reconstruction of the lumbar plexus

a: Image of a section of L2-L3 vertebra disc in VCH-F 1 dataset; b: Image of a section of L4-L5 vertebra disc in VCH-F 1 dataset; c: original image of VCH-F 1; d: region suction by the Photoshop CS; e: The 3-D reconstruction of the lumbar plexus and its adjacent structures (Anterior view); f: left oblique view; L2: L2 nerve root; L3: L3 nerve root; L4: L4 nerve root; L5: L5 nerve root; K: kidney; V: inferior vena cava; A: aortic artery; CIV: common iliac vein; ALV: ascending lumbar vein; PM: psoas