

## PRONE HIP EXTENSION

### Teaching points

This exercise can be surprisingly difficult for a patient to perform without inappropriately relying on the erector spinae to contribute to the movement.

Signs of this occurring include:

- Excessive lordosis
- Head lifted
- Observation of excessive erector spinae activity
- Patient reports 'lower back muscles working'
- Patient cannot 'feel the buttock muscles working'

Poor technique: excessive lordosis, head lifted



Poor technique: excessive erector spinae activity



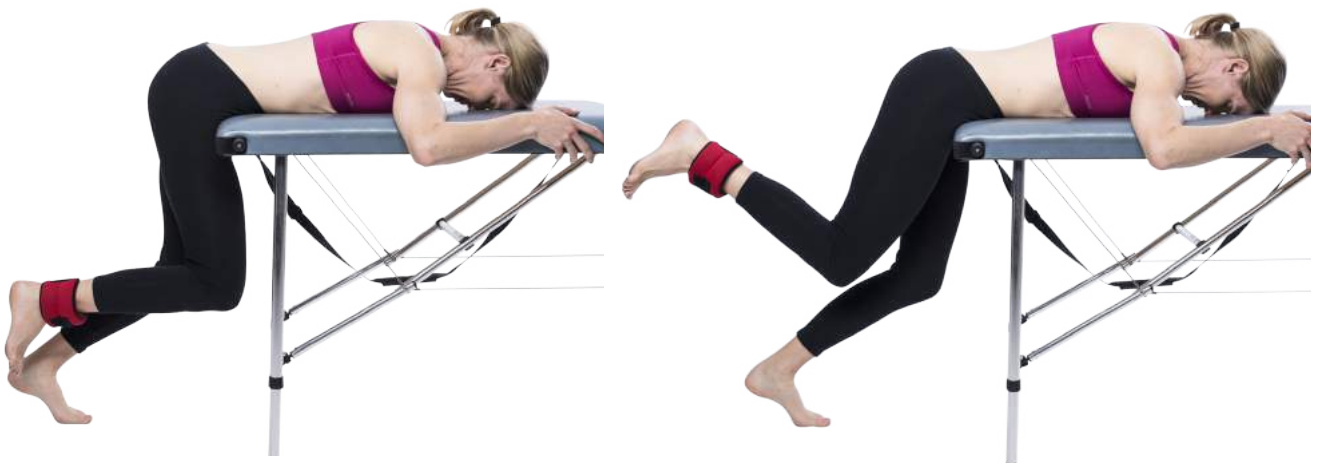
Correct technique: relaxed erector spinae



To address this you may wish to use the following techniques:

- Place your hands on the erector spinae and ask the patient to 'relax the muscles under my hands'
- Ask the patient to contract the gluteal muscles while lifting the leg<sup>24</sup>
- Prescribe the exercises with a smaller range of motion – stopping the leg movement at the point in which the patient starts to use their erector spinae

Alternative technique: small leg movement



There is some evidence that performing hip extension in 30° of abduction could increase the activation of the gluteus maximus and reduce the activity of the hamstrings.<sup>25</sup> Therefore you do not need to be concerned if the patient's leg naturally deviates from neutral and you could ask your patient to abduct the leg slightly if you wish.