A full-term firstborn female newborn was noted to have a painless hyperextended right knee at birth (Fig. 1). However, dysmorphic features, other deformities, or hyperlaxity were not observed. She had no family history of connective tissue disorders. Differential diagnoses for the deformation included congenital arthrogryposis, connective tissue disease, or congenital knee dislocation.

Lateral radiograph of the limb at neutral 0° position revealed right knee dislocation with an anterior displacement of tibia (Fig. 2A). Passive knee flexion was 45° which indicated a Tarek grade II congenital knee dislocation.

At 16 hours after birth, manipulation and reduction of the newborn’s knee was performed. Her knee was casted at a maximum flexion of 60°. Joint reduction was confirmed by post-procedural radiography. Clinical examination and anterior-posterior pelvic radiography (Fig. 2B) also revealed lateral subluxation of the right hip, with asymmetrical groin skin creases. She was discharged on day 3 post birth with planned serial casting of the knee. On day 10 post birth, her right knee was recasted at 90° of flexion. After 3 weeks, her cast was removed, and it was observed that her knee was stable without recurrent dislocation.

Ultrasound scan of the hips at the age of 6 weeks showed mild right hip dysplasia; therefore, treatment with Pavlik harness was commenced. Ultrasound scan at the age of 3 months showed improvement of right hip dysplasia. Her latest checkup at the age of 6 months revealed normal knee function and stable hips.

Figure 1 Painless hyperextended right knee at 70°.
Congenital knee dislocation is a rare condition with an incidence of 1 per 100,000 live births. Despite the initial alarming appearance, early manipulation and reduction within 24 hours of birth, and serial casting conveys good prognosis. As congenital knee dislocation is associated with developmental dysplasia of hip, screening and follow-up of hips are crucial steps in management of this condition.

Ethics approval was not required. Child’s parent provided informed consent.

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Declaration of Competing Interest

None.

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References