Clinical Quiz
What is the Diagnosis?

Our patients are monochorionic diamniotic twins and were referred to us at 7 years old for short stature. They were born at 35 weeks of gestation with birth weight of 1.92 kg and 1.87 kg respectively. The antenatal and postnatal courses were uneventful and parents were non-consanguineous. They were found to have short stature since early childhood and were referred by the Student Health Service at 7 years old to our endocrine clinic for workup and management. Father’s body height was 169.4 cm and mother’s body height was 145.9 cm and the mid-parental height was 151 cm (3rd centile). They were otherwise well with age-appropriate development.

Physical examination showed Twin 1 with body height of 106 cm (about 5 cm <3rd centile), Upper segment/Lower segment (US/LS) ratio of 1.33 (elevated), body weight of 17.4 kg (3rd centile), whilst twin 2 with body height of 101.4 cm (about 10 cm <3rd centile), US/LS ratio of 1.4 (elevated), body weight of 16.8 kg (<3rd centile). There were no obvious facial dysmorphism or neurocutaneous marker. There were no features suggestive of Turner syndrome. Both girls were found to have short and curved forearms, as well as bow legs. Systemic examinations were otherwise unremarkable. Clinical photos can be seen in Figure 1.

Endocrine examinations showed normal baseline hormonal blood tests including Thyroid function and IGF-1. X-ray for bone age showed bone age for Twin 1 was around 6.2 years and for Twin 2 was around 5.4-5.5 years at chronological age of 7 year 2 months old. Madelung deformity with splaying of distal radioulnar joint and deformity over distal radial epiphysis were also noted for both girls.

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Figure 1  Clinical photographs and hand X-ray of Twin 1 and Twin 2 (with consent for publication by parents).

Answer to "Clinical Quiz" on Pages 63-65
N.B. The Editors invite contributions of illustrative clinical cases or materials to this section of the journal.