

# Sprengel deformity and symbrachydactyly in Poland syndrome

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This is a 40-year-old male who presented to the outpatient clinic for evaluation of a small lump on his right anterior thigh. On physical examination, the patient was found to have findings consistent with Poland syndrome. Physical examination revealed asymmetrical chest wall deformity from the absence of the sternal portion of the left pectoralis major muscle (*Figure 1*). The hand examination revealed a hypoplastic left hand with short, webbed fingers also called symbrachydactyly (*Figure 2*). The shoulder blade was higher on his left (ipsilateral) side, a condition known as Sprengel deformity. The patient reported that he had these deformities since birth, thus the clinical diagnosis of Poland syndrome was made. Similar deformities were not present in any members of his family. Clinical and ultrasonographic findings of his right anterior thigh lump were characteristic of superficial lipoma. Because the patient was asymptomatic, no further investigations or interventions were performed for the lipoma and the above-mentioned clinical findings in our patient.

Poland syndrome, first described in 1841 by Alfred Poland, is a rare congenital condition classically characterized by unilateral chest wall deformity. Chest wall deformity results from muscle aplasia involving the pectoralis minor and sternal portion of the pectoralis major muscle. The syndrome most frequently affects the right side of the body, however, in our patient left side was affected. As per the classification proposed by Al-Qattan *et al.*, our patient has type 3A Poland syndrome, i.e., the classic deformity of the syndrome with brachydactyly and mild to moderate hypoplasia of the hand. The etiology is



**Figure 1** Asymmetrical chest wall deformity with the absence of left pectoralis muscle.



**Figure 2** A hypoplastic left hand with short, webbed fingers called symbrachydactyly.

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unclear but vascular defect during embryogenesis is thought to play a role in the development of Poland syndrome. The incidence of Poland syndrome is estimated to be 1 in 30,000 live birth and patient may have ipsilateral hand deformities like short, webbed fingers and abnormal short arm.

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