Gardner-Diamond Syndrome in an Adolescent Girl

Most cases of functional or behavioral disorders in children are often the diagnoses of exclusion. Likewise, Gardner–Diamond syndrome (GDS) is a label applied for spontaneously appearing ecchymoses or purpuric lesions, with no identifiable cause. It is often a diagnosis of exclusion after other causes of bleeding are ruled out by doing relevant investigations. Only a few hundred cases of GDS are reported worldwide. Treatment for the underlying psychological disorder is the key to the remission of the illness.

An 18-year-old girl presented with pain and warmth over her right forearm with a diffuse swelling followed by erythema. Two days later, it turned into an ecchymosis associated with pain and burning sensation and difficulty in writing, which lasted approximately 2 weeks. No constitutional symptoms like fever, headache, nausea, pain in the abdomen, vomiting, etc. were noticed. She had attained menarche with no overt menstrual bleeds, and had no history of bleeding diathesis in the past [2]. She complained of bruises over her right forearm two year back. There was no history suggestive of self-abuse of her writing hand. On inquiry, she narrated her experience with a stressful situation at home. She had a performance anxiety related to her school examination. There was neither a mention of any other stressful situations nor any conflicts at home. She was given medications in the form of oral antihistamines, steroids, and NSAIDs for a short course and did not have any recurrence. The family history was inconclusive of easy bruising or bleeding episodes in other family members. There was no history of any recent drug intake or drug reactions.

On evaluation, she appeared to be a nervous and anxious adolescent, with normal vital signs and a normal systemic examination. A local examination of the right forearm showed a tender, diffuse ecchymosis over the lower one-third on the ventral side. Pediatric gait, arms, legs, and spine examinations (pGALS) were normal. Her investigations showed mild anemia, a normal white blood cell count, platelet count, coagulation profile, a negative rheumatoid factor, weakly positive antinuclear antibody by immunofluorescence, and a normal thyroid function test. Magnetic resonance imaging of her right forearm done two year back had shown ill-defined altered echogenicity, suggestive of cellulitis with a normal arterial doppler study. An ultrasound and color doppler during this episode showed fat panniculitis with superficial thrombophlebitis.

Her family was briefed on how the search for an organic cause was made which was inconclusive. The importance of underlying psychosocial factor (pressure from her parents in this case) was conveyed to them, and psychiatry referral was sought and was well accepted by the family [3]. Treatment was given for her anxiety-depression disorder and she was called for regular counseling sessions. She suffered from anxiety neurosis later, whenever she skipped the treatment and follow up visits for counseling.

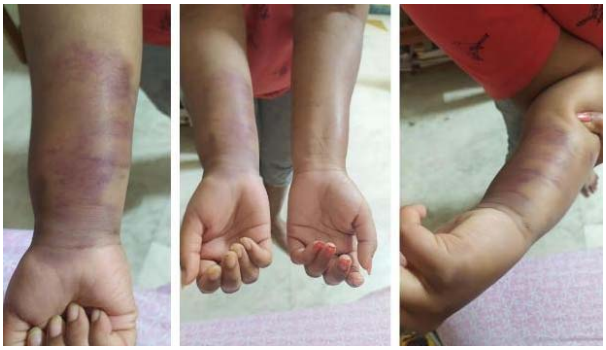

Fig. The forearm purpura appeared two days post-bruising, and remained for two weeks.

As purpura appeared every time at the same site, which suggested the possibility of self-abuse as the trigger and purpura occurring as the late manifestation, precipitated by psychological stress. The self-injury might have led to red blood cells inoculums and there was auto erythrocyte sensitization [4]. On a number of occasions later, the purpura appeared without any trivial trauma, which signifies the importance of psychological factors as the precipitating factor.

The purpura subsided in due course without any specific treatment and treatment was directed at the underlying psychological cause to prevent a recurrence. Pediatricians need to be aware of this uncommon and intriguing disorder, to ensure prompt diagnosis and appropriate management.

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