

**Joint Webinar on**  
**3<sup>rd</sup> Annual summit on**  
**Cell Signaling and Cancer Therapy**  
**&**  
**15<sup>th</sup> World Congress on**  
**Advances in Stem Cell Research and Regenerative Medicine**

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### **Prevalence, severity and determinants of pain in thalassemia**

**Background:** As the life expectancy in thalassemia is improving, pain is being recognized as an emerging problem. There is a need for a prospective observational study of pain in these high-risk patients.

**Objectives:** Assess the pain prevalence, severity, and impact of co-morbidities in thalassemia.

**Methods:** All patients >10 years of age (n=165) attending Thalassemia Day Care Center of a tertiary care hospital were assessed for pain prevalence, severity, and its effect on various life activities using Brief Pain Inventory. Their medical records were reviewed for the presence of various comorbidities.

**Results:** The pain was reported by 62.4% of participants with 35.2% and 59.4% participants, reporting pain in the past 1 week and 4 weeks respectively. A significantly higher pain prevalence was reported in females (p=0.03), patients residing in urban areas (p=0.03), and employed participants (p=0.03). The commonest sites of pain were the lower back and calves. General activity (p=0.02) and enjoyment of life (p= 0.02) were significantly affected due to pain in patients between 21 to 30 years of age. Female participants reported interference of pain with mood (p=0.03). A significant relation of pain prevalence was found with higher average serum ferritin (p = 0.015), moderate to severe liver iron concentration (p= 0.04), and lower levels of 25 hydroxyvitamin D levels (p=0.03).

**Conclusion:** Pain is an emerging cause of morbidity in thalassemia. The study found a significant association of pain with modifiable factors such as serum ferritin, LIC, 25 hydroxyvitamin D levels.

### **Biography**

Dr. Amanat Grewal has completed her MBBS at Dayanand Medical College and Hospital, Ludhiana, India. She has scored high throughout her medical professional years. She is the presenting author. She has completed a research paper on chronic pain in thalassemia and is now engaged in writing another on depression in chronic diseases among rural population. She has participated in many volunteer activities. She participated in poster presentation on correlation of levels of HbA1c with wound healing. In the year 2020, she presented a paper on chronic pain in adolescents with thalassemia and bagged third position.



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