

# DEMYSTIFYING GENERALISED PUSTULAR PSORIASIS (GPP) FOR PATIENTS:

Facts, Figures, and Realities

### UNDERSTANDING GPP

- Rare chronic skin condition caused by deficiencies in the immune system
- Severe and potentially life-threatening<sup>1</sup>
- Generalised means it impacts a larger skin area, and Pustular as it manifests as pus-filled bumps, or pustules<sup>2</sup>
- GPP cases can stem from **IL-36RN genetic mutation**. The gene is found in the skin, and regulates inflammation as the body's early immune response<sup>3</sup>



# IN SINGAPORE ALONE,

**40,000** affected by psoriasis<sup>4,5</sup>

## **400 ARE GPP PATIENTS**

GPP might be more prevalent than perceived. Often misdiagnosed as regular psoriasis, eczema, or skin infections<sup>6</sup>

#### **GPP DEMOGRAPHICS**

Mainly seen in adults and starts between the ages of

# 40 - 59

and is more common in women than men. It can also occur in infants, young children, and adolescents



## **RECOGNISING GPP: SYMPTOMS AND CHARACTERISTICS**

#### **Early symptoms**

- Dry skin with burning sensation
- High fever and discomfort<sup>7</sup>



#### **Characterisation**

- Recurring flares that emerge several times a year or every few years<sup>®</sup>
- The nature of flares can include:
  - Sudden appearance of small pustules'
  - Red patches on the skin surrounding pustules'
  - Extreme pain, itching, and burning°



#### Lasts for 2-5 weeks<sup>8</sup>

#### **Additional complications**

- Plaque psoriasis (scaly patches on skin)
- Inflammatory polyarthritis (swollen and painful joints)



#### Can lead to severe complications:

- Sepsis<sup>8</sup>
- Pneumonia
- Liver damage
- Cardiorespiratory failure
- Kidney disorders<sup>11</sup>



### **GPP SUBTYPES**<sup>7</sup>

GPP

#### Acute GPP

AFFECTED

**BODY PARTS** 

MANAGEMENT

- Highest risk of mortality 7
- Rapid widespread inflammation and pustule eruption<sup>12</sup>
- Fever, chills, nausea, disrupted appetite, fatigue<sup>12</sup>

#### Annular GPP

- Milder symptoms<sup>12</sup>
- Lesions developing into ring-like pustules and red patches
- Pustules lasting less than a day<sup>13</sup>

#### Pustular Psoriasis during pregnancy

- Eruption of red ring patches with non-infectious pustules
- Lesions within skin folds that spread rapidly<sup>14</sup>

## **COMPARING GPP WITH PSORIASIS**

**PLAQUE** 

**PSORIASIS** 

GPP may be misdiagnosed as plaque psoriasis, which accounts for 90% of the psoriasis cases.<sup>12</sup> However, GPP is more severe with **~50% higher mortality rate** 

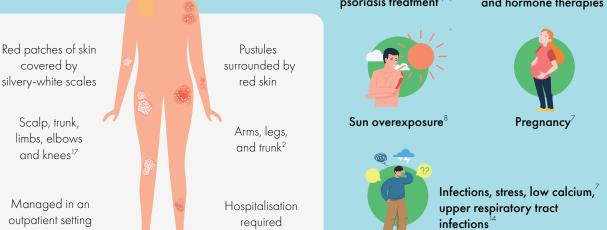
#### TRIGGERS FOR GPP FLARES



Discontinuing steroids during plaque psoriasis treatment<sup>1,18,19</sup>



Taking systemic medications including pain and hormone therapies<sup>8</sup>



# GPP: **BEYOND SKIN DEEP STIGMA AND SUPPORT**

#### DISPELLING GPP MYTHS TODAY FOR A MORE INCLUSIVE TOMORROW

#### GPP is not contagious!<sup>20</sup>

- Not an infectious disease caused by bacteria or viruses
- Non-transmissible; GPP cannot be contracted from someone by:
  - Shaking hands, including hands with lesions
  - Sharing food and drinks
  - Engaging in intimacy

#### GPP is not a reflection of poor hygiene or lifestyle choices<sup>20</sup>

- GPP is involuntary, caused by deficiencies in the immune system
- Symptoms appear despite patient seeking treatment; GPP has no cure yet

#### **SLEEP**<sup>22</sup> **MENTAL HEALTH<sup>21</sup>** 90% 38% experienced experienced clinical insomnia poor sleep quality \*\* \*\* experienced fear, anxiety, and were worried about loss of medication effectiveness **WORK AND DAY-TO-DAY** SOCIAL LIFE<sup>23</sup> PRODUCTIVITY Economic burden of GPP in Singapore 94% 6 out of 10 ~SGD 18,705<sup>24-28</sup> social life opped perienced stigmo Impaired physical activity (hospitalisation and treatment impacte cost (including biologics)) Denied salon access 4 out of 10 **65%** Social avoidance Internalized stigma **Reduced ability for** scriminatio leading to self-shame household activities

#### **OVERCOMING AND DESTIGMATISING GPP: HOW PATIENTS CAN MAKE A DIFFERENCE**



#### **Seek effective GPP** treatments

- Corticosteroid withdrawal after long-term usage can trigger flares<sup>8</sup>
- Traditional medicine or home remedies could worsen GPP<sup>5</sup>



#### Develop a holistic care plan

Including emotional support, as regulating emotions can help to prevent flares



🥦 vista health

5.5

#### **Engage** in conversations

- Destigmatise GPP
- Encourage empathy
- Foster inclusivity

## **CONNECT FOR SUPPORT AND MORE INFORMATION ON GPP/PSORIASIS**

#### Join a support group:



#### Helpline for urgent cases:

Rare Skin Conditions Society (Singapore)

+65 9005 8264

1 0



#### Committed to being your befriender throughout your **Psoriasis journey.**

Scan the QR code to join our community today



#### **References:**

References: 1 Gooderham, MJ et al. (2019). Expert Review of Clinical Immunology 15, 907–919. 2 Crowley, JJ et al. (2021). Postgraduate Medicine 133, 330–344 3 Available at: https://medlineplus.gov/genetics/gene/il36rn/. 4 Lim, W et al. (2021). smedi 62, 109–112. 5 TODAY Available at: https://www.todayonline.com/singapore/smells-rotaten-fish-pain-adour-rare-skin-disease-psoriasis-2215976. 6 Straber, B et al. (2021). Dermatol Ther [Heidelb] 12, 381–393. 7 Mirza, HA et al. (2023). Generalized Pusular Psoriasis. StatPearls Publishing in StatPearls & Choon, SE et al. (2022). Am J Clin Dermatol 23, 21–29. 9 Choon, SE et al. (2023). Journal of the European Academy of Dermatology and Venereology. 10 Choon, SE et al. (2023). Brinish Journal of Dermatology 189, 410–418. 11 Reich, K et al. (2022). Journal of the American Academy of Dermatology 10 Choon, SE et al. (2022). Expert Review of Clinical Immunology 189, 410–418. 11 Reich, K et al. (2021). Journal of the American Academy of Dermatology 10 Glo-619 16 Bachelez, H et al. (2022). Expert Review of Clinical Immunology 89, 616–619 16 Bachelez, H et al. (2021). Journal of General - Procedural Dermatology & Venereology Indonesia 5, 20 WebMD. Available at: https://www.webmd.com/sin.problems-and-treatments/psoria-sis/dealing-with-stigme-psoriasis. 21 Reisner, DV et al. (2022). Am J Clin Dermatology 32, 65–71 22 Sacmacc, H & Girrel, G. (2019). Sleep Breath 23, 893–898 23 Zimmermann, TM et al. (2023). Experimental Dermatology 32, 1219–1226 24 Available at: https://www.nuh.com.sg/patients-visitors/Pages/Charges-Payment.aspx. 25 Available at: https://www.healthxchange.sg:443/bones-joints/back-spine/ankylosing-spondylitis-reatment. 26 Megna, M et al. (2023). Clin Cosmet Investig Dermatol 16, 1677–1690 27 Available at: https://www.moh.gov.sg/healthcare-schemes-subsidies/subsidies-for-acute-inpatient-care-at-public-healthcare-institutions. 28 Almirall. Almirall Supports Wold Psoriasis Day 2017.