

# The fault in our scars

BY PATRICIA NEVES

A groundbreaking study recently presented to the British Association of Plastic, Aesthetic and Reconstructive Surgeons (BAPRAS – [www.bapras.org.uk](http://www.bapras.org.uk)), conducted at Great Ormond Street Hospital, in collaboration with the University of Toronto's Hospital for Sick Kids and University College London, has provided significant insights into the assessment of scars from the perspective of children and young people, between 8–18 years old.

Led by Patricia Neves, a plastic surgeon and clinical fellow of plastic surgery with extensive expertise in scar management, the research aimed to determine the validity of SCAR-Q, a patient-reported measurement for scars, and its association with body image perceptions, especially in younger patients. The study, entitled *Validating the SCAR-Q and Assessing the Relationship Between Body Image and the Experience of Scarring*, co-authored by Ms Whitney Quong, Ms Edel Buitleir, Ms Gaynor Osman, Ms Brigitte Harrison, and supervised by consultant plastic surgeon Mr Neil Bulstrode, was presented at the recent BAPRAS Annual meeting.

The SCAR-Q questionnaire is a relatively established patient-reported outcome measurement designed to reflect patients' opinions about the scarring process. Unlike traditional assessments that rely solely on clinician observations, SCAR-Q delves into the subjective experiences of individuals affected by scars, including appearance, psychosocial impact, and symptoms.

Author Patricia Neves says: "The SCAR-Q questionnaire is of great value as it can be used both in research and clinical settings. In research it can help us try to discover a little more about psychological issues, such as the link between mental health and scarring. The study proved it to be a valid scale, and so we are now able to use it for other research studies. In clinical settings, it allows us to directly assess if our treatment is effective for patients."

The questionnaire was tested by providing patients with three questionnaires: the BESAA (Body Esteem Scale for Adolescents and Adults), the VSS (Vancouver Scar Scale) and the POSAS (Patient and Observer Scar Assessment Scale). By providing patients with other validated questionnaires, researchers were able to test the validity of the SCAR-Q, finding it to be a valuable tool for understanding how patients feel about their scars. The questionnaire differs from others as it is entirely patient-reported and does not incorporate a medical or surgical assessment of the scar.

Additionally, SCAR-Q highlighted that patients with keloid scarring had significantly lower scores than people with other types of scarring. Keloid scars are a type of raised scar that occurs when the body produces an excess of collagen in response to an injury or wound. Unlike non-keloid scars, which may fade over time, keloid scars can continue to grow beyond the boundaries of the original wound and become larger than the surrounding skin. They are often firm, raised, and may appear shiny or lumpy. Keloid scars can be itchy, tender, or painful, and they can occur anywhere on the body. They are more common in people with darker skin tones and may develop after surgery, injury, acne, or even minor skin trauma.[1]

Patricia Neves continues: "SCAR-Q is a crucial tool in scar management because it ensures that treatments are aligned with patients' perspectives. A treatment may be deemed successful from

a clinical standpoint, but if it doesn't positively impact the patient's life, then it falls short of its true objective."

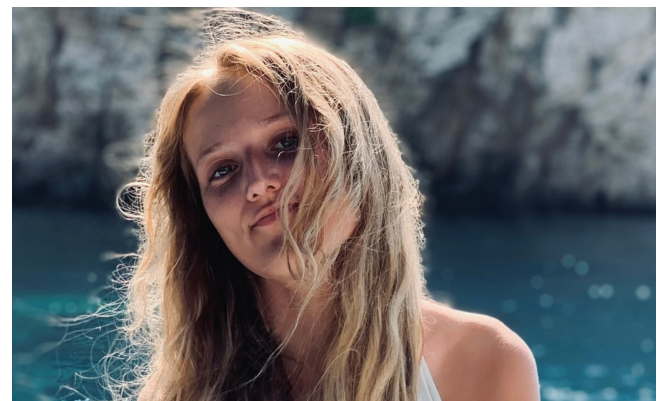
Consultant plastic surgeon and BAPRAS President Mani Ragbir says: "This study is an exciting development in patient-centred scar management. It marks a significant step forward in understanding the experiences of people living with scars, particularly children and young people, providing valuable insights into body image perception and overall wellbeing. This allows us, as surgeons, to create a holistic treatment plan that not only considers a medical or surgical assessment, but that also incorporates patient experience."

The study involved 24 participants aged between 8-18 years old, recruited from Great Ormond Street Hospital. Participants completed various questionnaires, including SCAR-Q, POSAS (Patient and Observer Scar Assessment Scale), and BESAA (Body-Esteem Scale for Adults and Adolescents), providing comprehensive insights into their scar experiences and body image perceptions.

## Case Study

Seventeen-year-old student Chloé, from London, developed keloid scarring following surgery. Her scars initially appeared unremarkable, but over time they became more pronounced and raised, affecting Chloé's confidence. Chloé has Moroccan heritage, and while keloids have been documented in all major ethnic groups, they are more commonly seen in individuals of African, Asian, Hispanic, and Mediterranean descent. Individuals with dark skin form keloids 15 times more frequently than lighter-skinned counterparts, with keloid formation as high as 16% in black and Hispanic populations. Studies show that a slight female predominance is evident, but other factors could be at play, including ear piercing. Keloids can occur at any age but are most common between the ages of 11 and 30 [2].

Chloé says: "My confidence took a hit as my scars became more visible. Their volume and dark purple / red colouring made me feel self-conscious, especially during the summer months when they are more visible. Always being asked about them is draining, making me uncomfortable as it makes me realise how noticeable they are. I am a pretty open and honest person but having others constantly ask and point out my medical scars, which I know is out of curiosity and



Chloé developed keloid scarring following surgery.



not malicious intent, is hard work. I also don't want to share my medical background.”

Chloé has undergone injections and keloid treatments to reduce the appearance of her scars but found the aftercare rigorous and tiring. Chloé scored poorly on the BESAA questionnaire, and was followed up with plastic surgeon Dr. Patricia Neves, co-author of *Validating the SCAR-Q and Assessing the Relationship Between Body Image and the Experience of Scarring*.

Chloé filled in the SCAR-Q questionnaire, self-reporting how she felt about her scars and how they impacted her overall wellbeing. Chloé says: “Participating in the SCAR-Q study was a turning point for me. The questions allowed me to authentically express my feelings about my scars. It's important to talk about your scars, as it's a way to subconsciously normalise them and get used to the fact that they will stay on your body forever, and that's okay. Self-confidence comes from within yourself, in accepting that the scars are there, finding beauty in them and the story they tell!”

### References

1. <https://www.mayoclinic.org/diseases-conditions/keloid-scar/symptoms-causes/syc-20520901#:~:text=A%20keloid%20scar%20is%20a,it%20can%20cause%20emotional%20distress>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2884925/>

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