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## Introduction

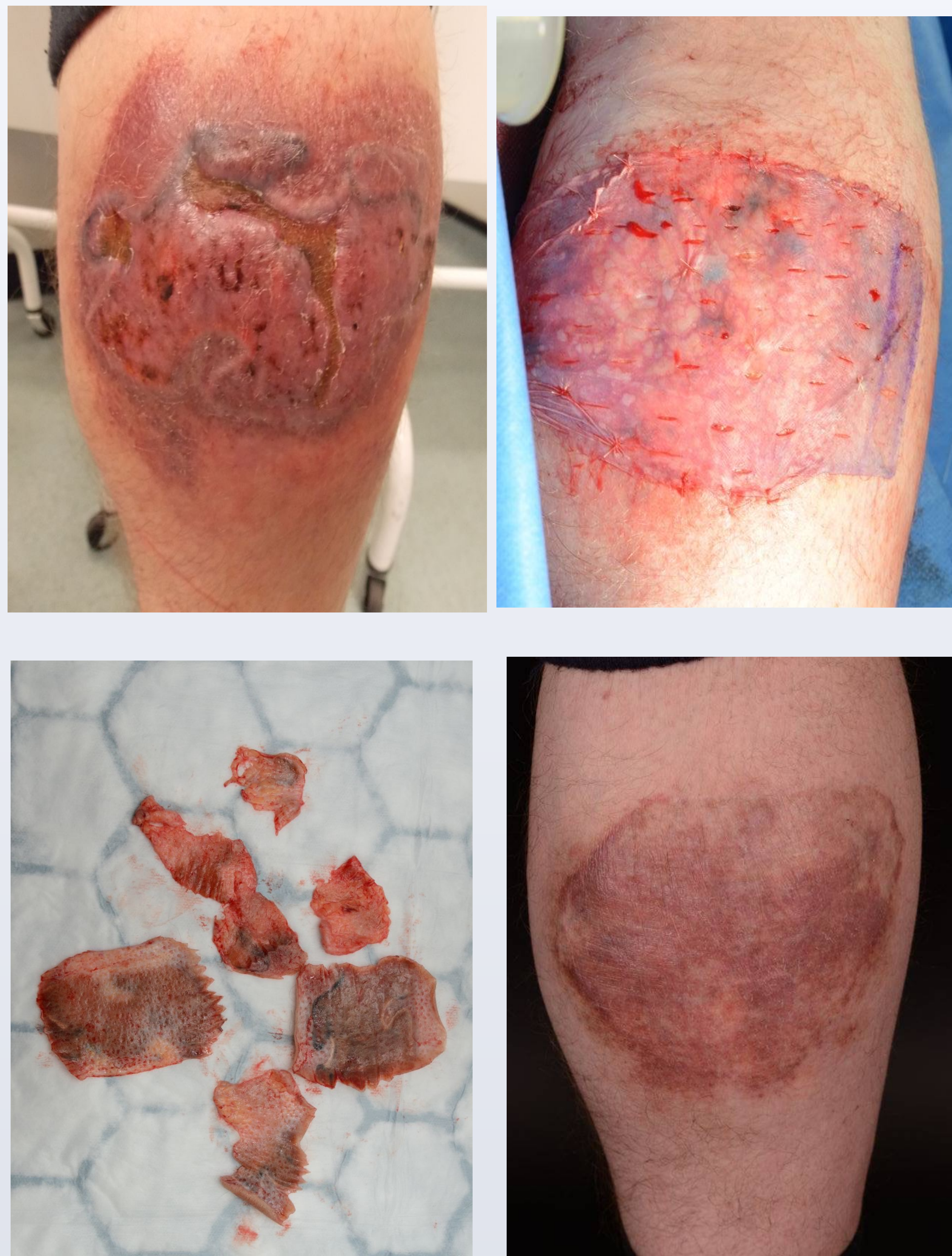
- Tattooing is used in both recreationally and for scar management including burn patients to disguise burn scar
- knowledge about the clinical spectrum, pathogenesis and treatment of complications from this practice is limited
- This prompted ECHA (European chemical agency) to ban coloured pigments for use in tattooing
- Case reports of Laser tattoo removal itself initiating local and more widespread allergic reactions

## Purpose of Study

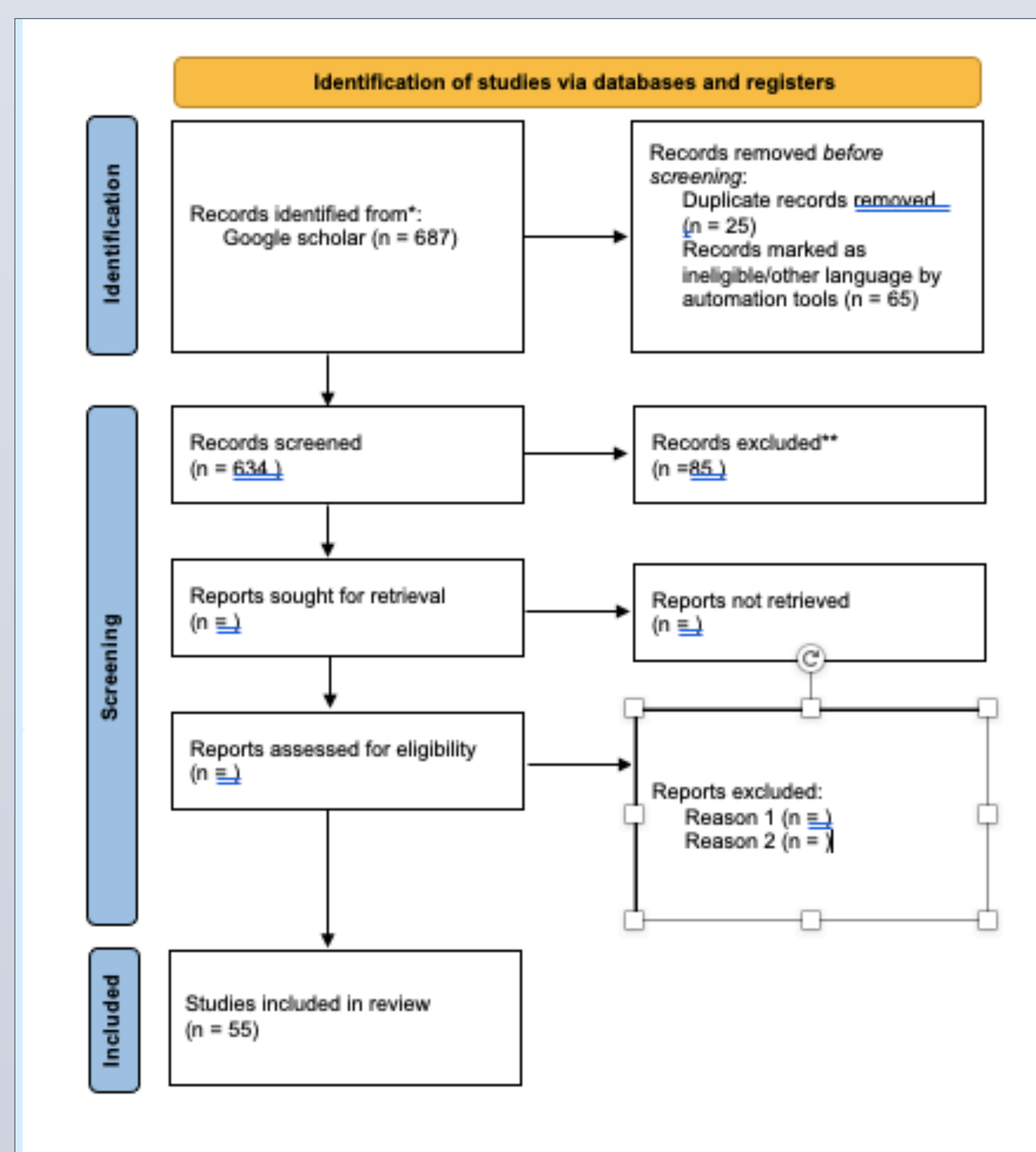
1. Share our experience with a severe case of chronic ulceration from granulomatous reaction to red tattoo pigment managed successfully with tangential excision and split skin grafting.
2. Provide perspectives on the ECHA coloured pigment ban along with literature review.

## Method

- Patients with severe ulcero- necrotic allergic reaction to red tattoo pigment underwent tangential excision and split skin grafting
- Literature review searching PubMed+Google Scholar
- Include
  - Colored dye complications
  - Skin only complications
- Excluded articles relating to
  - Temporary tattoo (henna)
  - Scarification
  - Black dye



51 year old with red tattoo done to right calf with delayed allergic reaction and progressively worsened to become ulcero-necrotic with inflammation. 1 year post op with no complications



## Result & Discussion

634 articles were identified with the search however only around 55 articles remained with the exclusion criterion

- Most complications with the red dye
- Variety of treatment options mainly non surgical

Complication	Clinical finding	Dye
<b>Immunological Reactions</b>	Allergic contact dermatitis	Red
	Lichenoid dermatoses	
	Granulomatous Pseudolymphomatous	
	Pseudoepitheliomatous hyperplasia	
<b>Infections</b>	Bacterial	Multicolour
	Viral	
	Fungal	
<b>Systemic /Local Reactions</b>	Psoriasis	Red followed by green
	Systemic sarcoidosis	
	Vitiligo	
	Cutaneous vasculitis	
<b>Malignance</b>	Keratoacanthoma	Red
	Rest coincidental	

## Conclusion

- We describe our successful preliminary experience with tangential excision and skin grafting in delayed severe ulcero-proliferative allergic reaction to red tattoo pigment which could be a definitive treatment.
- Alternative to numerous sessions of Q-switched Laser treatment - which might worsen the condition or be ineffective due to the inflammation
- Comprehensive review of literature

## Reference

- Gurnani, Pooja, et al. "Comparing the efficacy and safety of laser treatments in tattoo removal: a systematic review." Journal of the American Academy of Dermatology (2020).
- Serup, Jørgen, Mitra Sepehri, and Katrina Hutton Carlsen. "Classification of tattoo complications in a hospital material of 493 adverse events." Dermatology 232.6 (2016): 668-678.