## 1527 A Rare Case of Facial Skin Necrosis Following Subdermal Poly-L-Lactic Acid Injection

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Introduction: Non-surgical / minimally invasive aesthetic procedures are a growing trend in the UK. A range of devices are available for soft tissue augmentation, including injectable Poly-L-Lactic acid (PLLA). PLLA is used for soft tissue augmentation and is thought effective for the correction of contour deficiencies, facial wrinkles and in restoring subcutaneous volume in patients with HIV-associated lipoatrophy.

Method: In this case report, we present a rare but serious complication of subdermal injection of Poly-L-Lactic acid. A 45-year-old lady presented to our service approximately 24 hours after administration of self-sourced poly-L-Lactic acid.

Results: A 4cm ovaloid patch of full thickness skin necrosis over the zygomatic region was evident on presentation, with reactive/inflammatory changes in the adjacent skin. Vascular compromise is deemed the most likely cause, with loss of the transverse facial artery mapping to the area of necrosis. This patient was managed conservatively, with dressings and a prophylactic course of antibiotics.

Conclusions: Vascular compromise is a recognised and rare complication of subdermal injectable devices for facial soft tissue augmentation. The transverse facial artery branches from the superficial temporal artery within the substance of the parotid gland. Cadaveric and imaging studies alike demonstrate that the most common anatomical variant is a single TFA (70%), originating at the level of the temporofacial trunk of the facial nerve. It typically has a 5cm course, giving off on average 1.9 cutaneous perforators. This case highlights the importance of a detailed understanding of facial anatomy to ensure safe and effective placement of dermal fillers/devices.