### **BIOGRAPHIC DATA**

Name: William Pezzulo

Born: 07/02/1986

Blood group: B +

# **HOSPITAL ADMISSION - (08/10/2012 – 12/12/2012)**

Ospedale Villa Scassi Sampierdarena

Centro Grandi Ustionati

## **Diagnosis:**

Caustic acid burn, 3rd degree, 30% TBSA

#### **Anamnesis:**

No allergies, previous hospital admission for mononucleosis at 20 years of age. The 20<sup>th</sup> of September 2016 his ex-girlfriend pours on him a bucket of caustic acid. Admitted to the emergency department of Ospedale Civili di Brescia, the 21<sup>st</sup> is admitted to the Plastic Surgery department of the same hospital, on the 3<sup>rd</sup> of October he is admitted to the Anesthesiology and Intensive Care unit of the same hospital and the 4<sup>th</sup> back to the Plastic Surgery department.

#### **Clinical course:**

The patient has been admitted to the Intensive Care unit. During his hospital stay, numerous interventions have been undertaken: escharotomy, heterograft and autograft skin implantations, dermatomes implantations, balneotherapies and medications in anesthesia. The burns are extended to the face, the neck, the head and the anterior and posterior regions of the trunk, arms and abdomen. The patient has undergone amputation of both ears because of necrosis of the auricles. Marked hypovision at the right eye and complete blindness of the left eye. He has had many episodes of septic shock caused by Candida Albicans, Candida Parapsilosis, Acinetobacter Baumanni, MRSA Staphylococcus Aureus, Coagulase-negative Staphylococcus and Pseudomonas Aeruginosa. The 27/11/2012 episode of acute kidney insufficiency, then resolved in couple days. Important decrease in lean body mass and presence of major depression caused by the patient's condition. The patient has been transfused 14 times. The patient presents retracting and hypertrophic scars. He will need to wear elastic and compressive tutors and a silicon facial mask for the treatment of scar remnants and will need different reconstructing surgical interventions for the improvement of the range of movements and of the functionality.

#### **Examinations:**

CT scan total body (13/11/2012) – At the thorax presence of dysventilatory regions at the postero-basal level, bilaterally, with minimal pleural reaction. The rest of the examination does not present any significant alterations.

*Echocardiogram* (16/11/2012) – Normal LV systolic function, minimal mitral regurgitation not hemodynamically significant, absence of endocardial vegetation.

Chest X-ray (20/11/2012) – No evidence of pleuropulmonary lesions

# **Surgical interventions:**

(9/10/2012) – Balneotherapy and Escharotomy. Hemostasis of the right and left inferior limbs, left shoulder, thorax and abdomen.

(11/10/12) – Balneotherapy and medications

(13/10/2012) – Balneotherapy and medications

(16/10/2016) – Balneotherapy + Escharotomy + Artificial skin graft

(19/10/2012) – Courettage + Heterograft with porcine skin + Balneotherapy

(23/10/2012) – Escharotomy + Autograft (mesh graft 2:1, suturing with metallic clips) + medications

(26/10/2012) – Balneotherapy and medications

(30/10/2012) – Balneotheray + Escharotomy + Autograft from left inferior limbs (mesh graft 4:1 to the thorax, right leg, left shoulder and left flank) + medications

(2/11/2012) – Balneotherapy and medications

(6/11/2012) – Balneotherapy and medications

(10/11/2012) – Balneotherapy and medications

(12/11/2012) – Balneotherapy and medications

(15/11/2012) – Escharotomy + Autograft from right leg and left legs (mesh graft 1:4) + Balneotherapy + medications

(20/11/2012) – Balneotherapy and medications

(23/11/2016) – Balneotherapy + Courettage + Autograft from the right and left legs to the head region (mesh graft 2:1) + medications

(27/11/2012) – Balneotherapy and medications

(30/11/2012) – Balneotherapy and medications, removal of all the metallic clips.

(4/12/2012) – Balneotherapy and medications

# **Specialistic consultations:**

*Ophtalmologic:* In the right eye presence of corneal caustic injury, inferior and iridolenticular iridocorneal adherences, cyclitic membrane detached in the anterior chamber. In the left eye presence of colliquated cornea up to the deep strata, inferior corneo-scleral perforation, complete traumatic cataract.

Otorhinolaryngologic: Total avulsion of the left auricle and partial avulsion of the right auricle. Normal tympanic examination of the right ear, partial obstruction by ear wax of the left ear. Normal appearance of the superior quadrant of the tympanic membrane, hearing conserved. Lavage of the external meatus with Gentalyn 2 fl in 200 cc of Saline.

*Infectiologic:* During the hospital stay, persistence of the septic state. Positivity to S. Aureus MRSA, Pseudomonas Aeruginosa MDR, Acinetobacter Baumanni MDR, Candida Albicans, Candida Parapsilosis, Staphylococcus Coagulase negative. These antibiotics have been used to treat the septic state: Vancomycin 4gr/die, Merrem 3 gr/die, Tazocin 18 gr/die, Cancidas 50 mg/die, Cubicin 500 mg/die, Colistin 9.000.000 UI/die, Targosid 1000/die, Zyvoxid 1200 mg/die.

### Therapy at discharge:

Trazodone 25 gtt h 22

Sertraline 50 mg x 2/die

Lansoprazol 30 mg h 8

Right eye:

Betabioptal x 3/die

Cosopt x 2/die

Visumidriatic 1% h 20

Right eye:

Vigamox x 3/die

# **HOSPITAL ADMISSION -** (16/01/2013 – 18/01/2013)

Ospedale San Raffaele

Dipartimento Distretto Testa Collo

U.O. Oculistica – Unità Corneale e Superficie Oculare

Direttore: Dott. Paolo Rama

#### **Diagnosis:**

Left eye corneal perforation secondary to caustic injury

#### **Reason for admission:**

Left eye evisceration

#### **Anamnesis:**

In September 2012, caustic acid injury trauma with face damage; sent to the emergency hospital of Brescia.

#### **Examinations undertaken:**

*Left eye bio-microscopy:* widespread perforation and total melting of the cornea. Partial loss of ocular content.

#### **Surgical interventions:**

(17/01/2013) – Left eye evisceration under general anesthesia. Regular post-operatory clinical course.

## Clinical conditions at discharge:

Regular conditions, absence of pain

# **HOSPITAL ADMISSION -** (13/02/2013 – 16/02/2013)

Azienda Ospedaliera Universitaria di Verona

U.O. di Clinica Oculistica

Direttore: Prof. Giorgio Marchini

#### **Diagnosis:**

Right eye endothelial decompensation in a patient implanted with Baerveldt valve, presence of monocle.

### **Surgical operations undertaken:**

(13/02/2016) - Transplantation of right eye corneal endothelium

### Therapy:

Netildex 1 gtt x 6/die

Cosopt 1 gtt x 2/die for a month

### **HOSPITAL ADMISSION - (26/06/2013 – 1/07/2013)**

Azienda Ospedaliera San Gerardo di Monza

Chirurgia Plastica e della Mano

#### **Anamnesis and Reason for admission:**

Scar remnants post caustic acid injury – neck and left armpit

### **Diagnosis:**

Scar remnants post caustic acid injury – neck and left armpit

#### **Examinations undertaken:**

Pre-operatory routine

# Surgical operations undertaken:

(20/06/2013) – Extensive debridement at the level of the neck, obtaining passive extension of the neck, covering of the remnant tissue gap thanks to rotation and advancement of the musculocutaneous flap of the left pectoralis major. Closure of the pectoral region thanks to rotation

of the local cutaneous flap. Correction of the retracting scar of the left armpit thanks to multiple Z plastics. In accordance with the patient, autologous graft of subcutaneous abdominal fat by Coleman method, lipo-filling of the right temporal region (15 cc of autologous fat). Hemostasis, medication and drainage of the sutures.

#### Clinical conditions at discharge:

Regular post-operatory clinical course. Good conditions at discharge.

### **HOSPITAL ADMISSION - (04/08/2014 – 08/08/2014)**

Azienda Ospedaliera Universitaria di Parma

Chirurgia Plastica e Centro Ustioni

### **Diagnosis:**

Remnants of caustic acid injury of the face, trunk, superior and inferior limbs

### Past medical history:

2012 - Caustic acid injury 30% TBSA

2013 – Debridement of the retracting scar of the neck and covering through the left pectoralis major flap. Debridement of the left nasal ala scar and of the left superior lip with Z plastic flaps.

2013 - Right eye glaucoma

### **Proximal medical history:**

Scar remnants post caustic burn

#### **Surgical interventions:**

(04/08/2014) – Reduction of the amplitude of the rotation flap of the musculocutaneous left pectoralis major rotated at the base of the neck and face anteriorly. Removal of muscular tissue, fascia and fat tissue, re-positioning of the flap, removal of the skin scar over the mentioned flap. Execution of the dermal-epidermal graft (mesh 1:1.5). Hemostasis, positioning of the laminar drainage, compressive medication. Laser therapy with DYE (6.5 fl, 1,5 M/S, 10 mm SPOT) over the keloid scar on the left side of the face.

Clinical course complicated by bleeding after the intervention. Drainage and hematic harvest, correction of the retracting scars at the level of the base of the neck. Diffuse muscular bleeding. Accurate hemostasis and application of Tabotamp. Re-positioning of the previous flap, inserting of an aspirating drainage. Tie over on the graft.

# Therapy:

Keep medications dry and clean. Application of Gentalyn on the area of the face treated with laser. Apply photoprotection with solar cream SPF 50+ for a year.

# **HOSPITAL ADMISSION - (01/06/2015 – 04/06/2015)**

Azienda Ospedaliera Universitaria di Parma

Chirurgia Plastica e Centro Ustioni

# **Diagnosis:**

Remnants of caustic acid injury of the face, trunk, superior and inferior limbs

# Past medical history:

- 2012 Caustic acid injury 30% TBSA (Face, neck, thorax, superior and inferior limbs)
- 2013 Correction of the retracting scars with pedunculated flap from left pectoralis major
- 2013 Right eye corneal transplant
- 2013 Left eye explant and implant of ocular prosthesis
- 2015 Left and right auricular epitheses

# **Proximal medical history:**

Scar remnants post caustic burn (face, neck, thorax, arms)

### **Surgical interventions:**

(01/06/2015) – At the level of the anterior face of the neck removal of a large retracting scar. Resection of the retracting scar brides. Debridement and verification of the range of movement of the neck in hyperextension. Accurate hemostasis. Extraction of a partial thickness graft of the anterior side of the right leg. Flap implantation and covering of the surgical gap. Suture and tie over.

### Therapy:

Keep medications dry and clean.

### **HOSPITAL ADMISSION - (15/10/2015 – 23/10/2015)**

Azienda Ospedaliera Universitaria di Parma

Chirurgia Plastica e Centro Ustioni

# **Diagnosis:**

Remnants of caustic acid injury of the face, trunk, superior and inferior limbs

# Past medical history:

- 2012 Caustic acid injury 30% TBSA (Face, neck, thorax, superior and inferior limbs)
- 2013 Correction of the retracting scars with the pedunculated flap from the left pectoralis major
- 2013 Right eye corneal transplant
- 2013 Left eye explant and implant of ocular prosthesis

2015 – Left and right auricular epitheses

### **Proximal medical history:**

Scar remnants post caustic burn (face, neck, thorax, arms)

### **Surgical interventions:**

(15/10/2016) – Incision over the scar in the right cervical-dorsal region, creation of a supra-fascial pocket aimed at receiving a rectangular expansor of 15x8 cm (Allergan SRS-1508). Creation of a subcutaneous pocket aimed at containing the filling valve – the start of it was signed with a point at the level of the suture. Accurate hemostasis, filling of 100 cc of saline solution, positioning of aspiration drainage and suturing for strata.

(19/10/2016) – Drainage of hematoma at the level of the pocket through the precedent scar. Accurate washing of the cavity with antibiotic solution and hydrogen peroxide, drainage in aspiration, suturing for strata with monosyn 2/0 and nylon 3/0, re-positioning of the expansor and of the valve with 100 cc of saline solution.

#### Therapy:

Tachidol 1 x 3/die

Amoxicillin/Clavulanic acid 1 x 2/die

#### **HOSPITAL ADMISSION - (21/03/2016 – 27/03/2016)**

Azienda Ospedaliera Universitaria di Parma

Chirurgia Plastica e Centro Ustioni

#### **Diagnosis:**

Remnants of caustic acid injury of the face, trunk, superior and inferior limbs

### Past medical history:

- 2012 Caustic acid injury 30% TBSA (Face, neck, thorax, superior and inferior limbs)
- 2013 Correction of the retracting scars with pedunculated flap from left pectoralis major
- 2013 Right eye corneal transplant
- 2013 Left eye explant and implant of ocular prosthesis
- 2015 Left and right auricular epitheses

# **Proximal medical history:**

Scar remnants post caustic burn (face, neck, thorax, arms)

### **Surgical interventions:**

(21/03/2016) – General anesthesia, intubation with fibro-bronchoscopy. Difficult intubation.

Incision over the scar following the right clavicular line, up to the left proximal deltoid region. Removal of the cutaneous expansor previously inserted and of the relative filling valve. Creation of a pedunculated flap expanded to the posterior flap. Debridement of the areas of hypertrophy/dystrophy of the scar in the jugular region, anterior cervical region and ¼ superior region of the thorax. Accurate hemostasis. Removal of the excess adipose tissue in the previously prepared flap for a previous intervention on the left hemi-thoracic region. Removal of the scar triangle adjacent to the expansion site.

Transposition of the expanded flap and suturing of the same. Presence of a "dog ear" (flap's pedunculus). Accurate hemostasis. Apposition of an aspiration drainage from the wound in the right deltoid region. Covering of the residual missing anterior cervical region with a partial thickness graft taken from the dermatome at the level of the previous donating area in the anterior surface of the homolateral leg.

Medication with a wet dressing and bandaging with Amukine Med at the level of the donating site and of the sutures. Moderately compressive medication with wet dressing, Amukine Med and Steristrips at the level of the receiving site.

# Theapy:

Apposition of a soft collar.