

**LIP LACERATIONS**



*“Le Rouge Baiser”, ink on paper, Rene Gruau, “Without hesitation”, French Lipstick Advertising campaign, 1949.*

*“There are wild, hungry kisses or there are rollicking kisses, and there are kisses fluttery and soft as the feathers of cockatoos. It’s as if, in the complex language of love, there were a word that could only be spoken by lips when lips touch, a silent contract sealed with a kiss. One style of sex can be bare bones, fundamental and unromantic, but a kiss is the height of voluptuousness, an expense of time and an expanse of spirit in the sweet toil of romance, when one’s bones quiver, anticipation rockets, but gratification is kept at bay on purpose, in exquisite torment, to build to a succulent crescendo of emotion and passion”.*

*Diane Ackerman, “A Natural History of the Senses”, 1990.*

*In her sensuous book A Natural History of the Senses, Ms Ackerman explores the sense of touch through a kaleidoscopic array of experiences; including - the kiss, of which she writes with an arresting authority! She ponders the evolutionary origin of French kissing, and finds herself in agreement with the Biologist, Desmond Morris, who wrote:*

*“...In early human societies, before commercial baby food was invented, mothers weaned their children by chewing up their food and then passing it into the infantile mouth by lip-to-lip contact - which naturally involved a considerable amount of tonguing and mutual mouth pressure. This almost bird-like system of parental care seems strange and alien to us today, but our species probably practiced it for a million years or more, and adult erotic kissing today is almost certainly a Relic Gesture stemming from these origins...Whether it has been handed down to us from generation to generation...or whether we have an inborn predisposition towards it, we cannot say. But whichever is the case, it looks rather as though, with the deep kissing and tonguing of modern lovers, we are back again at the infantile mouth-feeding stage of the far distant past...If the young lovers exploring each other’s mouths with their tongues feel the ancient comfort of parental mouth-feeding, this may help them to increase their mutual trust and thereby their pair-bonding”.*

*This explanation is all very well - but is somehow a little unsatisfying - a bit too “clinical” for such an intimate act perhaps? Ms Ackerman takes her exploration a little further - she goes on to describe a somewhat more intriguing, Freudian viewpoint - she continues...*

*“...According to anthropologists, the lips remind us of the labia, because they flush red and swell when they’re aroused, which is the conscious or subconscious reason women have always made them look ever redder with lipstick. Today the bee-stung look is popular; models draw even larger more hospitable lips, almost always in shades of pink or red, and then apply a further gloss to make them look shiny and moist. So, anthropologically at least, a kiss on the mouth, especially with all the plunging of tongues and the exchanging of saliva, is another form of intercourse, and it’s not surprising that it should make the mind and body surge with gorgeous sensations”.*

*Following that climactic conclusion, Ms Ackerman, continues with the origin of “X”...*

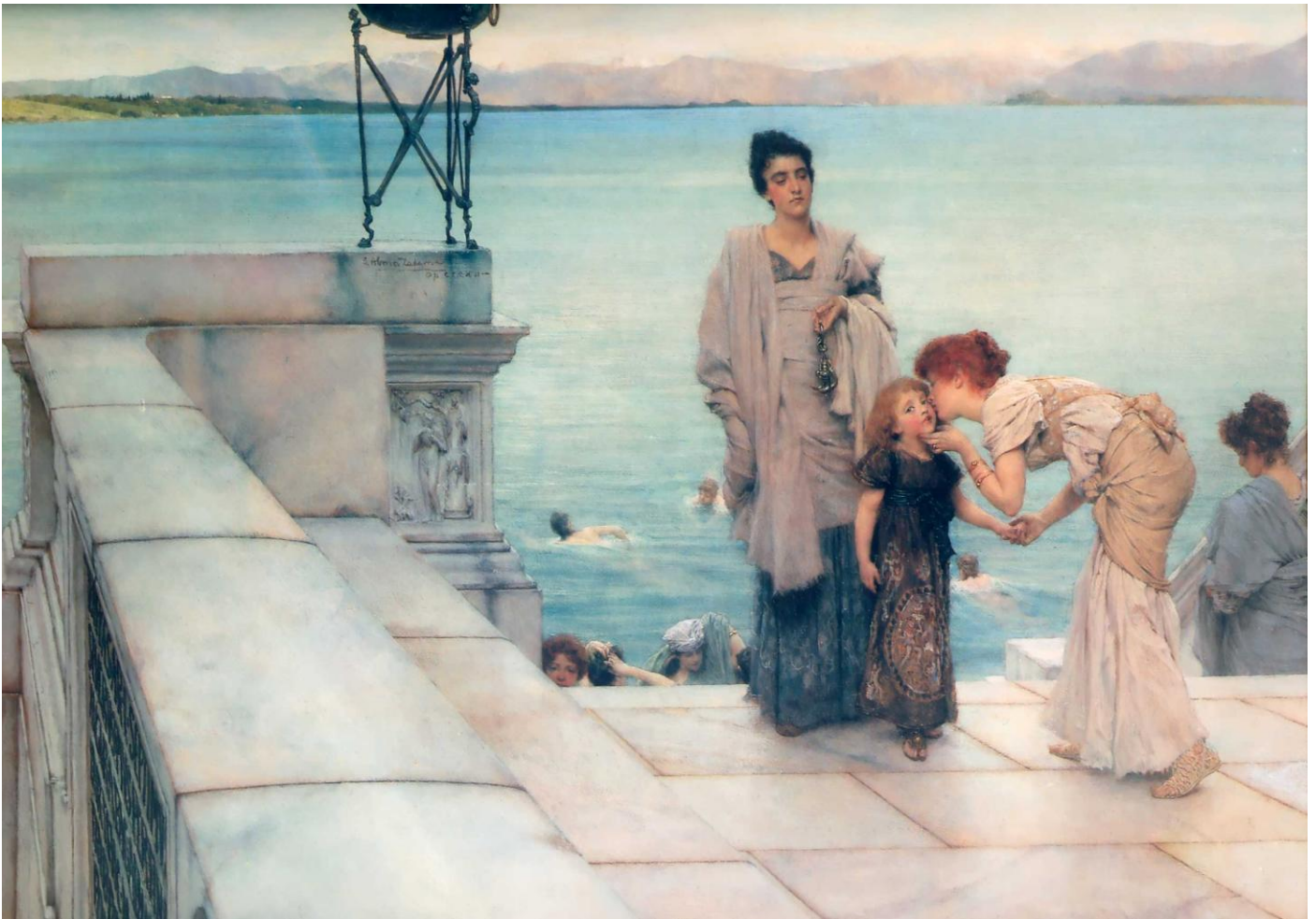
*“...In ancient Egypt, the Orient, Rome, and Greece, honour used to dictate kissing the hem or feet or hands of important persons. Mary Magdalen kissed the feet of Jesus. A sultan often required subjects of varying ranks to kiss varying parts of his royal body.*

*High officials might kiss the toe, others merely the fringe of his scarf. The riffraff just bowed to the ground. Drawing a row of XXXXXs at the bottom of a letter to represent kisses began in the Middle Ages, when so many people were illiterate that a cross was acceptable as a signature on a legal document. The cross did not represent the crucifixion, nor was it an arbitrary scrawl, it stood for “St Andrew’s mark”, and people vowed to be honest to his sacred name. To pledge their sincerity, they would kiss their signature. In time the “X” became associated with the kiss alone...*

*...It used to be fashionable in Spain to close formal letters with QRSP, (Que Besa Su Pies - who kisses your feet), or QBSM, (Que Besa Su Mano - who kisses your hand)”*

*Ms Ackerman then signs off her chapter with an X!*

*And so we see from Ms Ackerman’s insightful narrative the extreme importance to humans of the lips! They are much more than mere mechanical masticators; they are also, by dint of eons of evolution, profoundly important aspects of our most basic social and cultural fabric and as such it is of great importance that lacerations of the lips are repaired with a primary aim of good cosmesis!*



*“A Kiss” oil on canvas, Sir Lawrence Alma-Tadema, 1891.*

## LIP LACERATIONS

### Introduction

Lacerations of the lips are common Emergency Department presentations.

Lip injuries may be the result of accidental injury, but may also not uncommonly be the result of:

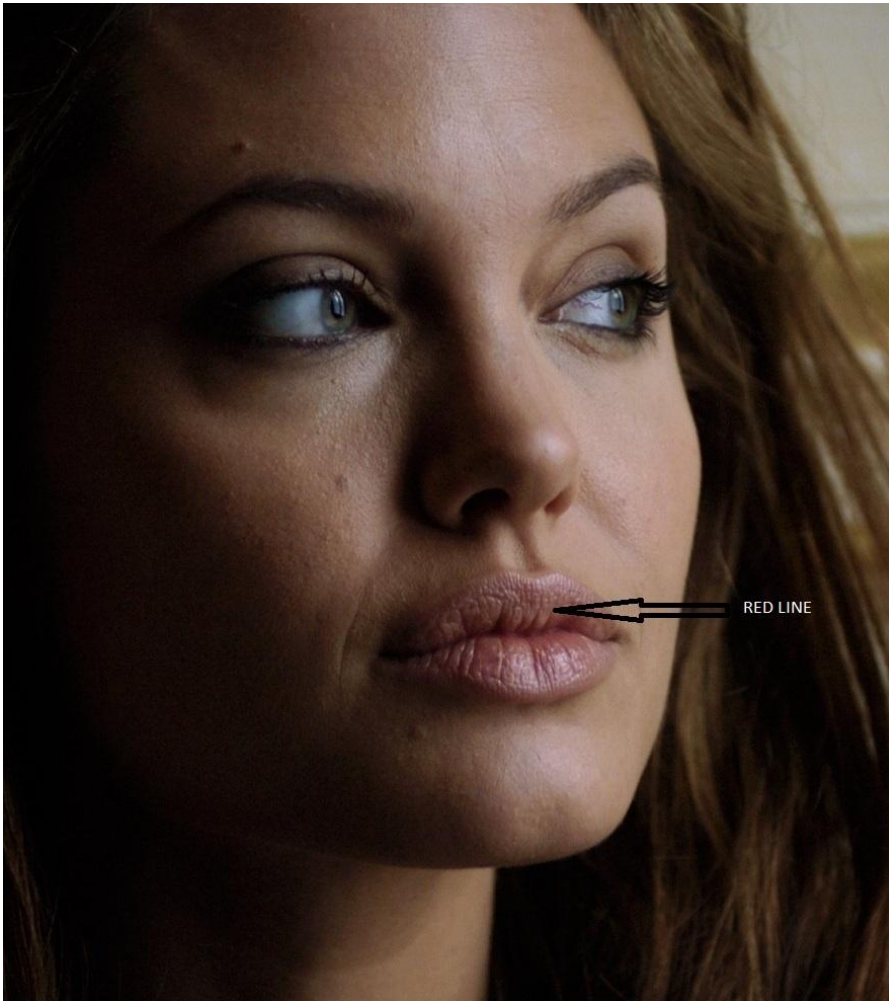
- Assault in adults

*Or*

- Abuse in children.

The lips are complex anatomical structures that have significant psychosocial and as well as functional importance. Good **cosmetic** outcome is therefore important with lip injuries and where this cannot be readily achieved within the Emergency Department, referral to the Plastic Surgical Unit will be required.

### Anatomy



*Ms Angelina Jolie is well known for having the most perfect lips in the world. She is well qualified therefore to demonstrate for us the “red line” of the lip.*



The “red line” (or “wet-dry” line) of the lip represents the transition line from internal moist (wet) oral mucosa to external dry lip vermilion.

This line is one of the essential anatomical landmarks required for accurate reconstruction of the lip.

The important landmark line is the vermilion-skin border

**Both** these lines need to be accurately aligned to achieve a good cosmetic result.

### Clinical assessment

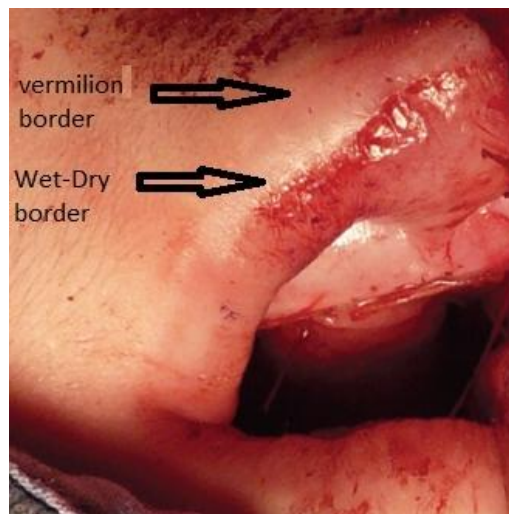
#### Important points of history:

Lip trauma in adults will frequently be the result of assault, and in these cases good medico-legal documentation is important.

In children, falls resulting in lip lacerations are common, but the possibility of abuse should also be kept in mind.

Establish the patient’s tetanus immune status.

#### Important points of examination:



*The vermilion-skin border and the red (or wet-dry) border of the lip.*

Check for any associated intra-oral lacerations

Check for any associated **dental** injuries

Assess the integrity of the **vermilion - skin border** and the **red border**.

- A simple yet effective way of identifying the red line in bloody lip wounds, is the fact that blood generally adheres to the wet mucosa and not to the dry, thus clearly

and consistently identifying the junction between wet and dry mucosa, (as shown above).<sup>2</sup>

## Investigations

Radiographs may be required, to assess associated dental, maxilla or mandibular trauma.

## Management

### 1. Conservative:

- Lacerations of the **inner lip** that do not cross the vermilion-skin border rarely need *any* intervention.

Most will heal very well with conservative management, unless very extensive.

### 2. The following are **not** suitable for lip wounds:

- Tissue adhesive glues, (e.g. “Dermabond”)
  - ♥ These are **not** suitable for mucosal surfaces, and as such are not used for lip wounds.
- Tissue adhesive strips (e.g. “Steristrips”)
  - ♥ These are **not** suitable for mucosal surfaces or regions of excessive movement.

### 3. Wound closure:

Superficial lacerations may be closed in the Emergency Department providing:

- It is done by a person with appropriate experience
- The patient is cooperative
- A good cosmetic result can be achieved.

## Cosmesis:

The key to a good cosmetic result resides in:

- **Accurate alignment of the red line border (done first)**
- **Accurate alignment of the vermilion-skin border (done second).**

## Anaesthesia:

- **Children present particular difficulties, and will usually require deep sedation or full general anaesthesia.**
- Some paediatric cases may be suitable for **ketamine** sedation in the Emergency Department
- Regional nerve blocks are useful, as direct injection into lip wounds can distort the anatomy and make the important landmark borders difficult to identify.
  - ♥ **Mental nerve block:** lower lip, skin below the lip.
  - ♥ **Infraorbital nerve block:** upper lip, lateral nose, lower eyelid, medial cheek.
- If direct injection into the wound is decided on, injection through the wound itself is less painful than through the sensitive skin of the lip.

## Sutures:

- Mucosa and muscle can be repaired with **4/0 catgut** (absorbable) or **Vicryl** (absorbable).
- Sutures through the skin can be done with **5/0** or **6/0 nylon**.
  - ♥ Nylon is the suture material of choice to close a skin wound on the face.
- All percutaneous stitches will result in some degree of needle scarring if left in situ longer than **8 days** as epithelium will migrate down the needle track.<sup>3</sup> By the same token removal that occurs too early risks wound dehiscence. It is important to minimize scarring to the lip and so sutures to the lip (which has a good blood supply and so good healing) are generally removed at **5 days**.

## Disposition:

Extensive and / or cosmetically damaging wounds are best referred to a Plastic Surgical Unit. In Bendigo discuss with ED consultant before making any referral.

Delays up to 24 hours may be acceptable prior to definitive debridement and repair in the operating theatre, provided interim wound care is of a good standard.<sup>3</sup>

Accurate approximation of the vermilion border and the red line border is important for the best cosmetic result, and most wounds that cross the vermilion-skin border are referred to the plastic surgical unit. In Bendigo discuss with ED consultant before making any referral.

Lacerations extending into the gum margin (e.g. degloving injury) may be referred to the Dental or Facio-Maxillary Unit.

References

1. RCH Clinical Guidelines
2. Nicholas Wilson Jones & Cynthia Verchere, "The dirty lip trick", Can J Plast Surg Vol 16 No 4 Winter 2008.
3. Waller R, Tan Gim, Wound Care and Repair, in Cameron et al. Textbook of Adult Emergency Medicine, 3rd ed 2009.
4. <http://practicalplasticsurgery.org/>

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