

COPY

EXPERT MEDICAL REPORT

GERARD BADEN-CLAY

PREPARED BY:

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EXPERT REPORT OF DR MARGARET MARY STARK

1. Presentation

- 1.1 This report was prepared at the request of Detective Sergeant Peter Roddick, of the State Crime Operations Command, of Queensland Police Service.
- 1.2 This report relates to the case of Gerard BADEN-CLAY, aged 41 years (DOB 09/09/1970) at the time of the incident. Mr Gerard BADEN-CLAY has been charged with the murder of his wife Alison Baden-Clay.
- 1.3 I have been asked to comment on the possible causation of injuries to the right side of the face of Gerard BADEN-CLAY and the injuries to his right hand, chest and neck.
- 1.4 In preparing this report I have read a number of documents:
- Covering emails from DS Roddick dated 19/07/2012
 - Statements of Dr Renu Kumar dated 26/04/2012 & 30/04/2012
 - Statement of Dr Candice Mykel Beaven dated 25/05/2012
 - Excerpts of a transcript of record of interview dated 20/04/2012
 - National Injuries Database report dated 16/07/2012
 - Series of photographs taken over 2 days Friday 20th April & Saturday 21st April 2012
 - Photographs of a razor undated
 - Photographs of the victims' hands undated
 - Statement of Dr Leslie Griffiths undated
 - Original notes of Dr Leslie Griffiths dated 14/06/2012
 - Statements of A/Prof Robert Hoskins dated 19/07/2012 and 23/07/2012
- 1.5 I believe that the facts I have stated in this report (save those provided by the parties that I am unable to verify by reference to objective evidence) are true, and the opinions I have given based upon them, are correct.
- 1.6 My specialised knowledge based on my training, study and experience is specified in my abbreviated curriculum vitae detailing my qualifications and experience appended to this report Appendix A. My opinion is expressed substantially based on that knowledge.
- 1.7 I have not personally examined Gerard BADEN-CLAY. The opinions expressed in this report are based on the abovementioned documents and may be changed if more information becomes available.

2. Transcript of record of interview with BADEN-CLAY

2.1 Gerard BADEN-CLAY states in the transcript of interview that he injured his right hand fixing a light fitting when a screwdriver slipped off the screw and scratched him. With regard to the right cheek injury he states that he injured himself shaving with a razor.

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3. Statement of Dr Mykel

3.1 Mr BADEN-CLAY attended Kenmore Clinic Medical Practice at 08:30am on Saturday 21st April 2012 and saw Dr Candice Mykel, general practitioner. He asked her to look at his facial injury stating that he had cut himself shaving using an old razor on Friday 20th April 2012.

3.2 I note that Dr Mykel states in her medical opinion she cannot be certain as to the cause of Mr BADEN-CLAY's facial injuries although she felt it unlikely and unusual that his facial injuries were a result of shaving. She states she saw three well separated abrasions to the right cheek and thought it unlikely he had sustained these injuries with two shaving motions, and more so, to have not noticed any bleeding or injury from the site after the first shaving motion and before continuing to shave.

4. Statement of Dr Kumar

4.1 Mr BADEN-CLAY went to visit Dr Kumar, general practitioner, on Saturday 21st April 2012 at about 4pm at the Taringa Medical Centre. During the course of the consultation Mr BADEN-CLAY showed Dr Kumar a series of marks on his face and upper body which she documented.

4.2 When questioned as to how he got the marks on his chest Mr BADEN-CLAY replied that he "scratched himself" and did a scratching action over the marks to emphasis what he was saying.

4.3 BADEN-CLAY also told Dr Kumar that he had used an old razor and that was how he had cut himself on his face.

4.4 BADEN-CLAY said a caterpillar landed on him and he removed it and then scratched the area causing irritation. Dr Kumar noted a superficial abrasion at that point on his neck.

5. Statement of Dr Griffiths

5.1 Dr Griffiths examined Mr BADEN-CLAY at approximately 19:15 hours on 22nd April 2012 and found a number of injuries of 'forensic interest'. I have not been provided with the original notes relating to this examination.

5.2 Dr Griffiths describes two parallel linear scratch abrasions to the right lower cheek midway between the angle of the mandible or jaw and the chin. The longer of the two abrasions were about 25mm in length.

5.3 Dr Griffiths stated that there were signs of epithelialisation and healing and he estimated that the injuries were at least 48 hours, and possibly 72 hours, old.

5.4 Dr Griffiths concluded that these injuries resemble fingernail scratches. In fact, any sharp objects drawn across the cheek in the direction of the jawline could have abraded the skin and give rise to injuries such as these.

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5.5 On the upper chest Dr Griffiths described several parallel abrasions which resemble patterned type; the longer of these extend to over 6 cm in length. Dr Griffiths stated that these could have been caused by the strap of a backpack forced against the pattern of a shirt and causing some discrete intra-dermal bruising.

5.6 In line with these but to the subject's left of the sternum (breast-bone) is another patterned abrasion with intra-dermal bruising and a possible degree of directionality. Dr Griffiths states that this injury may have been caused by pressure and movement.

5.7 Dr Griffiths states that on the central chest there is a distinct bruise with signs of yellowing suggesting that it is at least 18 hours old resulting from blunt force trauma to the chest.

5.8 Dr Griffiths stated that no definite conclusion could be reached as to the causation of the injuries on the upper chest. The injuries were intradermal bruises.

5.9 On the left lower neck there were two distinct parallel linear abrasions, the longer of which is about 3cm in length and extending in the general line of the neck and into the upper shoulder.

6. Statement of A/Professor Robert Hoskins

6.1 A/Professor Hosking has enlarged the area of the facial injuries which now shows two different injuries he described in sections 45-47 of his report of 19/07/2012.

6.2 He concludes that:

- The main facial injuries have all the hallmarks of fingernail scratches though it is impossible to say that they were caused by fingernails.
- "In over 50 years of life and 30 years in medical practice I have never seen nor heard of injuries of this type being caused by the modern type of disposable razor or razor blade. Each of the main injuries has features making it implausible that it was caused by shaving."
- The main injuries were not caused at the same time as the more trivial injuries (on the right lower cheek) which are fairly characteristic of razor cuts.

6.3 In his second report of 23rd July 2012 A/Professor Hoskins reviews the injuries to the left neck and chest of BADEN-CLAY.

6.4 He concludes that the injuries to the neck are bruises; those to the left chest patterned intra-dermal bruising with three very small superficial abrasions.

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6.5 He states (point 22) that "if scratching took place without or underneath an item of clothing then anything which was sufficiently vigorous to have caused such extensive intra-dermal bruising would be expected to be associated with significant skin abrasion."

7. Photographs

7.1 Interpretation of injuries from photographs should be treated with caution as the quality of the final image depends on a number of factors such as the skills of the photographer, lighting exposure, colour and other factors in the printing process.

7.2 There are two sets of photographs. I have been advised that the first set of photographs was taken on Friday 20th April 2012 within hours of Alison Baden-Clay being reported missing and approximately 14-16 hours after the last confirmed contact with BADEN-CLAY. The second set of photographs was taken on Saturday 21st April 2012 a further 24 hours after the first set of photographs.

7.3 Photographs

First set

0889 Face and shoulders

0890 & 0891 Abrasions to right cheek

0892 Outstretched hands

0893 & 0894 Linear abrasion to the palm of the right hand (proximal palm base of thenar eminence medially)

7.4 Second set

2491 Whole body frontal view injury to left upper chest and right axilla

2492 Upper body frontal view injury to left upper chest and right axilla

2493 Close up of right axilla petechial haemorrhage bruising over an area greater than 5cm

2494 Close up of right axilla petechial haemorrhage bruising over an area greater than 5cm

2495 Upper chest showing bruising to right axilla and upper left chest

2496 Close up of bruising to the upper left chest

2497 Areas of bruising to the left side of the lower neck

2498 Close up of bruising to the left side of the lower neck

2499 ditto 2497 & 2498

2500 Very close up bruising to the left side of the lower neck

2501 Abrasions to right lower cheek

2503 as 2501

2504 Back no injury seen

2505 Abrasions to right lower cheek: one of approx. 3cms but not continuous; one of approx. 1.5cm; and one of approx. 1cm; and one near the lower corner of the mouth.

2506, 2507 and 2508 as 2505 - scale different orientation

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8.1 The gold standard for a forensic medical examination is a comprehensive clinical examination with full documentation contemporaneously, supported by body diagrams and photographs as appropriate.

8.2 I have not been provided with any past medical history in relation to Mr BADEN-CLAY. For the purposes of the interpretation of these injuries I will assume that there is no relevant past medical history and that he not taking any medication that would affect the interpretation of the injuries.

8.3 An abrasion (graze) results from damage to the most superficial part of the skin. An abrasion may result from blunt trauma causing damage to the skin surface and/or may occur with contact with a rough surface.

8.4 Bruises result from blunt force, the blow rupturing the small blood vessels beneath the intact skin allowing blood to leak from the surrounding tissues.

8.5 Blunt trauma injury can be caused in a number of ways, for example, a blow with a fist or another hard object, a kick, or a knock against a hard surface. This may result in findings on examination, depending on the severity of force used, including: no abnormality detected; reddening; swelling; tenderness; bruises; abrasions; lacerations and fractures.

8.6 Many bruises, unless patterned or in groups, are non-specific injuries. Common types of patterning seen include intradermal, that is surface, bruising and petechial, that is pin-point, bruising.

8.7 The ageing of bruises is imprecise. A bruise with a yellow colour can be said to be more than 18 hours old.² Colours of red, blue and purple/black can occur at any time within 1 hour of bruising to resolution.

8.8 The colouration of bruises and the progress and change of colour patterns cannot (with the exception of a yellow colour which may be considered to be more than 18 hours old) be used to time injury.

8.9 Furthermore the estimation of bruise age from colour photographs is also imprecise and should not be relied upon.

¹ Payne-James JJ. & Hinchliffe J. Injury Assessment, Documentation, and Interpretation. Chapter 4. In Stark MM. Ed. Clinical Forensic Medicine. A Physician's Guide. Third edition. Humana Press, Springer, New York, 2011; and

Payne JJ. & Gall J. Injury interpretation: Possible errors and fallacies. Chapter 9. In Current Practice in Forensic Medicine. Eds. Gall J. Payne-James JJ. Wiley-Blackwell, Oxford, 2011

² Langlois NEI. and Gresham GA. The ageing of bruises: a review and study of hte colour changes with time. Forensic Science International 1991;50:227-238

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8.10 Other information, for example a witnessed blow, is the only way of reliably timing a bruise. Many bruises exhibit multiple colours at the same site despite being caused at the same time.

8.11 The amount of bruising seen is dependent on a number of factors including site and force of impact. The soft parts of the body e.g. the abdomen rarely have visible bruising whereas those with underlying areas of bone are more likely to bruise easily (e.g. limbs and scalp).

9. Opinion

9.1 The injury to the palm of the right hand, as pictured in photos 0893 and 0894, is a linear abrasion. This injury is typical of contact with a rough surface as could occur with contact with a certain type of screwdriver. The explanation provide by BADEN-CLAY in interview gives a plausible causation and cannot be discounted.

9.2 I agree with A/Professor Hoskins when he states in paragraph 10 (report of 19/07/2012) that abrasions resulting from fingernails across the skin have a breadth (width) to them.

9.3 I note the two different abrasion injuries as highlighted in A/Professor Hoskins report of 24/07/2012 and I agree with his conclusions that the main injuries were not caused at the same time as the more trivial injuries (on the right lower cheek) which are fairly characteristic of razor cuts and appear more recent.

9.4 The main facial injuries which show evidence of healing in photos 2505 and 2506 to the face of Gerard BADEN-CLAY are typical of abrasions resulting from fingernails.

9.5 The injuries to the left side of the neck photo 2498, left chest photos 2495 and 2496 and right armpit photo 2493 are petechial haemorrhage, or pin-point, bruising. This is typical of pressure being applied to the skin through clothing.

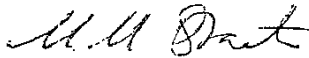
9.6 In my opinion it is highly unlikely that these injuries (described in 9.5 above) were self-inflicted. I agree with A/Professor Hoskins that if such extensive intradermal bruising to the chest had resulted from self-inflicted scratching there would also have been significant skin abrasion.

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The Justices Act 1886

I acknowledge by virtue of section 110A(6C)(c) of the Justices Act 1886 that:

- (1) The written statement by me dated this 10th October 2012 and contained in the pages 1 to 12 is true to the best of my knowledge and belief; and
- (2) I make this statement knowing that if it is admitted as evidence, I may be liable to prosecution for stating in it anything I know is false.



Signature

Margaret M Stark

Signed at Sydney this 10th day of October 2012

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APPENDIX A

Current Appointments:

Director, Clinical Forensic Medicine Unit (CFMU), NSW Police Force

Honorary Forensic Physician, Forensic Medical Unit (FMU), Westmead Hospital

Adjunct Professor, Faculty of Medicine, The University of Sydney

My qualifications are as follows:

Bachelor of Medicine and Bachelor of Surgery awarded by the University of London in 1981

Diploma in Geriatric Medicine awarded by the Royal College of Physicians in 1989

Diploma in Medical Jurisprudence (Clinical) awarded by the Society of Apothecaries of London in 1992

Diploma in Addictive Behaviour (with distinction) awarded by the University of London in 1992

Master of Laws (Legal Aspects of Medical Practice) awarded by the University of Wales in 1996

Founding Fellow of the Faculty of Forensic and Legal Medicine, Royal College of Physicians of London in 2005

Postgraduate Certificate in Medical Education awarded by the University College London in 2008

Fellow of the Higher Education Academy in 2009

Diploma in Medical Education awarded by University College London in 2009

Master of Science in Medical Education awarded by University College London in 2010

Fellow of the Australasian College of Legal Medicine 2011

Experience:

I am the Director of the CFMU and a Forensic Medical Officer for NSW Police Force since May 2011. I am an Honorary Forensic Physician to the FMU of Westmead Hospital, Sydney, since December 2011. I have been a medical practitioner since 1981 and have worked as a Forensic Physician (FP) since August 1989 in London, England (Forensic Medical Examiner (FME) 1989-2011; Principal FME 1999-2009). I was the Medical Director of the Forensic Healthcare Service for the Metropolitan Police Service, London 2010-2011. I was the David Jenkins Professor of Forensic and Legal Medicine of the Royal College of Physicians of London 2011-2012. I regularly attend court as a professional witness and an expert witness both for the prosecution and defence. I have been trained in the legal aspects of report writing and giving evidence in court and have wide experience of both.

I have edited Clinical Practice Guidelines for Forensic Medical Officers, NSW Police Force, November 2011. I have co-edited "Good Practice Guidelines for Forensic Medical Examiners – MPS" in 2001 (Second Edition, 2004; last update November 2008) writing the guidelines on Substance Misusers (drugs and alcohol) in Custody and Procedures under the Road Traffic Legislation. This has been revised for Dyfed Powys Police, January 2003; Wiltshire Constabulary, September 2003; Thames Valley Police, October 2003, Dorset Police, May 2004; Avon & Somerset Constabulary, November 2004; Royal Military Police, 2005; many of these are updated yearly, most recently April 2009.

I studied for the Diploma of Addictive Behaviour in the Centre for Addiction Studies at St. George's passing with distinction. I previously (1999-2001) had special responsibility for the distance learning course leading to a Postgraduate Diploma in Addictive Behaviour. My dissertation for the Masters degree above was entitled "The Legal and Ethical Aspects of the Management of Drug Addicts in Police Custody". I am co-author of a book "Symptoms and Signs of Substance Misuse" (second edition, 2003), and also co-authored the chapter "Substance Misuse" in the second (1996) and third (2009) editions of the textbook Clinical Forensic Medicine. I have written two chapters for the Encyclopaedia of Forensic and Legal Medicine (2005) – "Body Cavity Searches, Practical Issues and Consent" and "Substance Misuse: Medical Effects".

I have edited a textbook "Clinical Forensic Medicine – A Physician's Guide" (now in its third edition, 2011) in which I co-authored four chapters ("Substance Misuse", "Care of Detainees", "Fitness for Interview" and "The History and Development of Clinical Forensic Medicine"). I was the rapporteur in 1994, 2000, 2006 and 2011 for the production of "Substance Misuse Detainees in Police Custody - Guidelines for Clinical Management".

I have been approved under Section 12 (2) of the Mental Health Act 1983 as having special experience in the diagnosis and treatment of mental disorder 1998-2011. I was an examiner for the Diploma in Medical Jurisprudence (Clinical), the Diploma in Forensic Medical Sciences and the Membership Examination of the Faculty of Forensic and Legal Medicine (FFLM). I lecture on medico-legal matters to other professionals and have presented papers to numerous UK and international conferences. I have published many articles and research papers on various aspects of clinical forensic medicine. I have been involved in government sponsored research into drugs and driving.

I was the Founding Academic Dean of the FFLM and member of the Academic Committee (since 2006-2012). I am a Past President of the Association of Forensic Physicians (AFP) (President 2002-2004), member of the Education and Research Committee of the AFP (from 1995-2006, Chairman from 1995-2000). I am a member of the Editorial Board of the Journal of Forensic and Legal Medicine (since 1997-). I am the Education Officer for FAMSACA since August 2011.

Previously I have held hospital posts in Emergency Medicine, General Medicine, Cardio-Thoracic Medicine and Oncology. I have also been Principal in General Practice and worked regularly in Family Planning (1988-1996) training as an instructing doctor. I was awarded Membership of the Faculty of Family Planning and Reproductive Health Care of the Royal College of Obstetricians and Gynaecologists in 1993 when the Faculty was founded. I was awarded Fellowship of the Australasian College of Biomedical Sciences in 2006.

Relevant Recent Publications (full list available on request):

Original Articles in Peer Reviewed Journals

- Stark MM. Management of Drug Misusers in Police Custody. *Journal of the Royal Society of Medicine* 1994;87:584-587
- Schnieden V., Stark MM., Payne-James J. Violence in Clinical Forensic Medicine. *Med.Sci.Law* 1995;35;4:333-335
- Rogers DJ., Stark MM., Howitt JB. The use of an alcometer in clinical forensic practice. *Journal of Clinical Forensic Medicine* 1995;2;4:177-183
- Stark MM., Rogers DJ., Howitt J. Domestic Violence: do forensic physicians have a role? *Journal of Clinical Forensic Medicine* 1997;2;59-63
- Rogers DJ., Stark MM., Davie M. Medical complications associated with the use of rigid handcuffs. *Journal of Clinical Forensic Medicine* 1998;5;34-37
- Deehan A., Stark MM., Marshall E.J., Hanrahan B., Strang J. Drunken detainees in police custody: is brief intervention by the forensic medical examiner feasible? *Criminal Behaviour and Mental Health* 1998; 8;214-221
- Stark MM., Rogers DJ., Cooper G. Pre-hospital emergency care in clinical forensic medicine. *Pre-hospital Immediate Care* 2000;4:97-99.
- Stark MM., Norfolk GA., Rogers DJ., Payne-James JJ. The validity of self-reported substance misuse amongst detained persons in police custody. *Journal of Clinical Forensic Medicine* 2002;9:25-26
- Best D., Noble A., Stark MM., Marshall EJ. The role of forensic medical examiners and their attitudes on delivering brief alcohol interventions in police custody. *Criminal Behaviour and Mental Health* 2002;12:230-235
- Stark MM., Englehart K., Sexton BF., Tunbridge RJ., Jackson P. Use of a pupillometer to assess change in pupillary size post cannabis. *Journal of Clinical Forensic Medicine* 2003;10:9-11
- Stark MM., Gregory M. The clinical management of substance misusers in police custody – a survey of current practice. *Journal of Clinical Forensic Medicine* 2005;12:199-204
- Best D., Havis S., Payne-James JJ., Stark MM. Near miss incidents in police custody suites in London in 2003: A feasibility study. *Journal of Clinical Forensic Medicine* 2006;13:2:60-64
- Stark MM. Principal Forensic Physicians as Educational Supervisors. *Journal of Forensic and Legal Medicine* 2009; 16:392-296
- Stark MM. & Norfolk GA. Training of Assistant Forensic Medical Examiners in London, UK. *Journal of Forensic and Legal Medicine* 2010; 17: 194-197
- Webb V., Stark MM., Cutts A., Tait S., Randle J., Green G. One model of health care provision – Lessons Learnt through Clinical Governance. *Journal of Forensic and Legal Medicine* 2010;17:368-373
- Stark MM. & Norfolk GA. Training in clinical forensic medicine in the UK - Perceptions of current regulatory standards. *Journal of Forensic and Legal Medicine* 2011;18: 264-275

Research Reports

Stark MM. Literature Review of Death Certification Procedures - International Aspects. Department of Health, November 2000

Sexton BF., Tunbridge RJ., Brook-Carter N., Jackson PG., Wright K., Stark MM., Englehart K.
The influence of cannabis on driving. TRL Report 477 Transport Research Laboratory for the Road Safety Division of the DETR, December 2000

Noble A., Best D., Stark MM., Marshall EJ. The Role of the Forensic Medical Examiner with "Drunken Detainees" in Police Custody. Police Research Series Paper 146. Home Office, February 2002

Sexton BF., Tunbridge RJ., Board A., Jackson PG., Wright K., Stark MM., Englehart K.
The influence of cannabis and alcohol on driving. Transport Research Laboratory for the Road Safety Division of the DETR, August 2002

Bucke T., Teers R., Payne-James JJ., Stark MM. Near Misses in Police Custody: a collaborative study with Forensic Medical Examiners in London . IPCC Research and Statistics Series: Paper 10. IPCC, March 2008

Books

Stark MM., Payne-James JJ. Symptoms and Signs of Substance Misuse. Greenwich Medical Media, London, 1996, Second Edition, 2002

Stark MM. Editor. Clinical Forensic Medicine - A Physician's Guide . Humana Press, Totowa, New Jersey, 2000. Second Edition, 2005, Third Edition, 2011.

Stark MM., Rogers DJ., Norfolk GA. Good Practice Guidelines for Forensic Medical Examiners. Metropolitan Police, 2001; Second Edition, November 2004, updated every six months. Revised for Dyfed Powys Police, January 2003; Wiltshire Constabulary, September 2003; and Thames Valley Police, October 2003; Avon & Somerset Constabulary, November 2004; Royal Military Police, November 2005.

Case Reports

Rogers DJ., Stark MM. Case Report - Think drink, think drugs, think overdoses. Journal Clinical Forensic Medicine 1998;5:147-149

Stark MM., Rogers DJ. Learning points in practice. Hypoglycaemia: A Hidden Danger. Journal of Clinical Forensic Medicine 1998;5:211-212

Stark MM., Wells D. Drug-mediated sexual assault. Journal of Clinical Forensic Medicine 1999;6: 53-55
Rogers DJ., Stark MM. Driving whilst unfit through drugs. Journal of Clinical Forensic Medicine 1999;6:166-167

Stark MM., Brener N. Case Report - Needle Phobia. Journal of Clinical Forensic Medicine 2000;7:35-38

Review articles

Stark MM. The medical care of detainees and the prevention of tragedy – the role of the forensic medical examiner. Clinical Risk 2000;7:1:15-19

Stark MM., Tunbridge RJ., Rowe D., Fleming P., Stewart D. Drugs, Driving and Sobriety Tests – A Review of Recent Developments. Journal of Clinical Forensic Medicine 2002;9:126-132