

Knife Crime: Challenges of a South London Trauma Centre

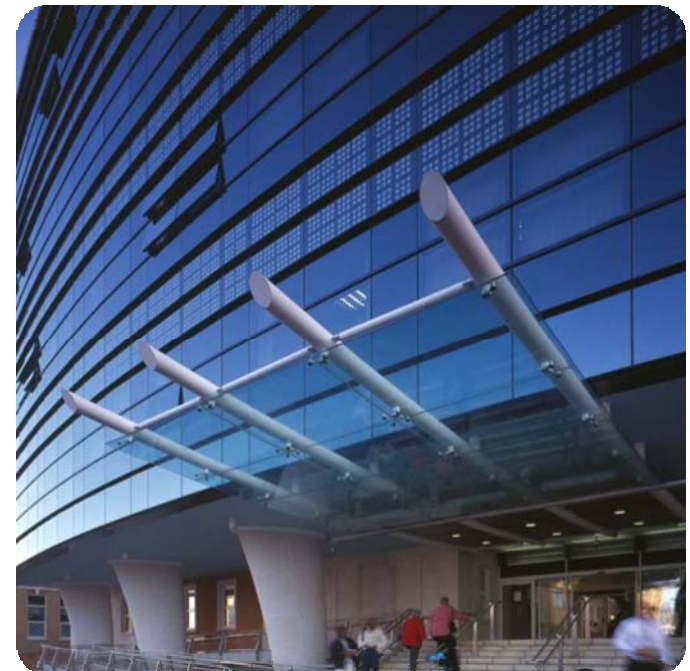
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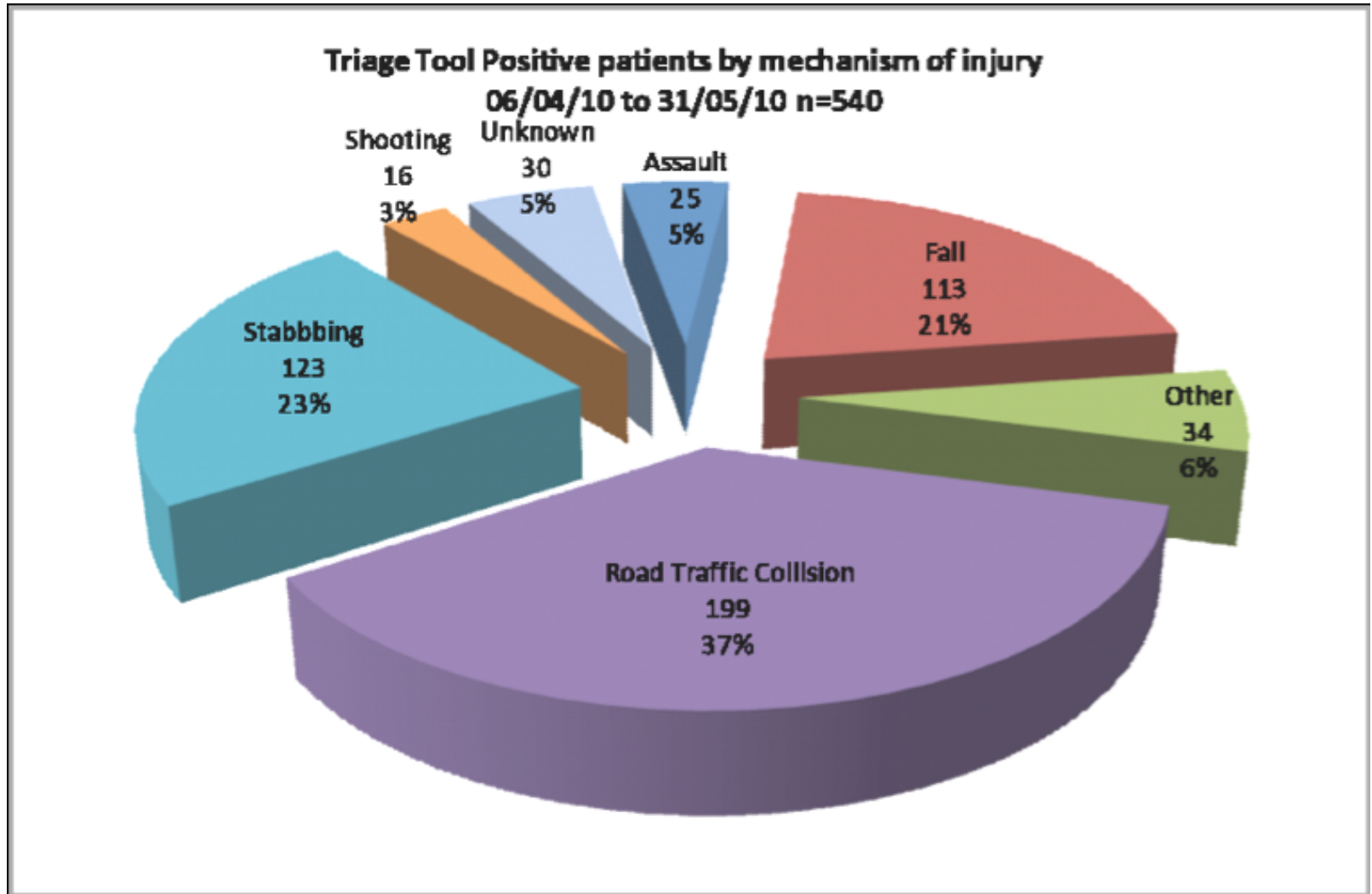
Background

- 1 of 4 London Trauma Centres in 2010

Year 1

- Critical Care admitted 207 trauma patients
 - 23 knife related (11%)
 - Average 2-3 patients per month
 - Injuries vary- chest and abdomen (spine/head)
 - All survived (who reached Critical Care)

Trauma- Predominant Mechanism of Injury



Paul

Name and details have been changed
to protect confidentiality (NMC
2008)

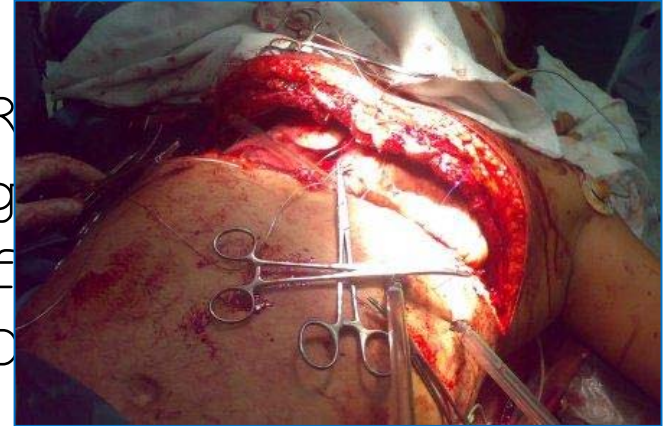
On arrival to Trauma Centre

- Peri arrest
- Hypotensive
- Hypovolaemic - extensive blood loss
- Bilateral thoracostomies (LAS)
- Likely pericardial tamponade
- Intubated and ventilated
- Bilateral chest stab wounds
- Multiple back stab wounds
- 1 right parasternal stab
- Cold



Straight to OR

- Clam shell thoracotomy
- Massive blood loss - Code R
- Repair of laceration to right
- Repair of laceration to left
- Exploratory laparotomy- NAD
- Coagulopathy
- Re- exploration of thoracotomy for bleeding points
- Massive transfusion (24 units RBC, FFP, PLT, and Cryo + 2L gelo)
- Theatre time 6 hours



- Hypotensive BP 42/27
- Cold 33.2°C
- pH 7.14
- BE -14.9
- Lactate 9.3 mmols/l
- Noradrenaline 0.9 mcg/kg/min
- Adrenaline 0.9 mcg/kg/min
- SIMV/PS FiO_2 .5
- 3 x Chest drains drained 1L on arrival



Initial Management

- RBC, FFP (1:1.5)
- Cardiothoracic review
- Active warming
- Family/Police
- Correct coagulopathy
 - Clotting products
 - Tranxemic acid
 - Vitamin K
 - Novoseven



Following day

- MAP > 60 mmHg
- Inotrope weaning
- Lactate improving (4 → 3 → 1 mmols/l)
- Acidosis persisting (pH 7.27, BE -8)
- Query rhabdomyolysis
 - CK 4416iu/l
- CVVHF commenced



Days 2-25

- Day 2 Adrenaline weaned off (MAP 70 mmHg)
- Day 2 NA weaned 0.04mcg/kg/min
- Day 3 LLL consolidation → pneumo.
- Day 5 CVVHF stopped
- Day 7 Agitated during sedation hc
- Day 7 Chest drains removed
- Day 9 Self extubated and trial of
- Day 10 Tracheostomy
- Day 11 Out of bed
- Day 13 Speaking valve
- Day 17 CPAP trial and ventilator weaning plan
- Day 18 Swallow test
- Day 20 Trachy mask and panic attacks
- Day 25 Discharged to ward



UK Reported Knife Crime

- Nationally knife offences fell by 4% in 2010
- Homicide increasing nationally (200 deaths in 2010)
(Home Office 2011)
- Knife crime increasing Lambeth (+19.2%), Lewisham (+30.9%) and Southwark (+9.5%) in 2010/11
(MPA 2011)

Youths and Knife Violence

- Young adults and adolescents
- Male and female
- Being a victim increases odds of perpetrating
- Negative peer influences
- Family disruption
- Social Isolation

(Becker et al 2003)

- Lack of education
- Gangs
- Security- fear and fashion
- Poverty/for the financial benefits
- A perceived lack of opportunities/facilities
- Lack of suitable role models
- Lack of respect for themselves and others

(Kinsella B 2011)

Challenges

- Major trauma training **at n c** ATLS®
- Psychological Care
- Safeguarding- Young People (>14 years)
- Controlling visitors
- Understanding knife crime and gang culture
 - Risk of readmission
 - Risk of retaliation (Cunningham et al 2009)

Broken Britain or a Public Health Problem?

Preventative Measures

Collaborative working

- ED
- Youth workers
- Safeguarding team
 - To include siblings
- Social services
- Police

Outreach

- Schools
- Youth centres
- Families
- Communities

Education and training

- Nursing staff
- Doctors
- AHPs



Follow up services

- home visits,
- assistance with jobs/ education
- Support for family members
- Rehousing

Do we have a role in Critical Care?

- Bedside support
- Recognising the pivotal period
- Early referral
 - Youth workers
 - Safeguarding Team
 - Psychologists
- Contributing to MDT review meetings

Paul

- Suffering from breathlessness on exertion
- Agoraphobic
- Referred to psychologist for PTSD
- Aims to raise awareness:   raising

Thank you for
listening

Any Questions?

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