




FORENSIC MARKERS

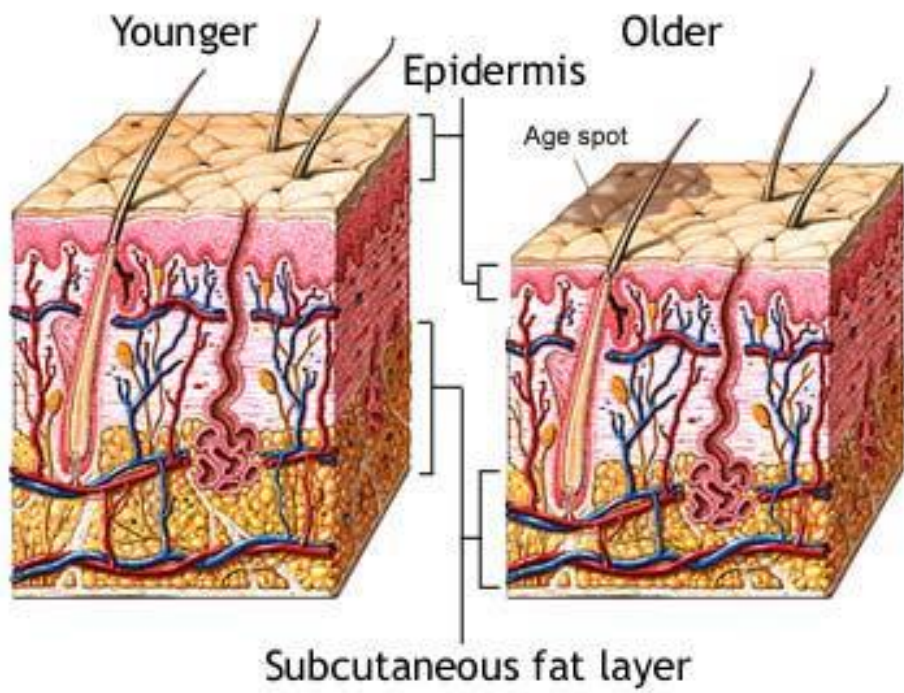
Elder Abuse Webinar Series
March 2011





Forensic Markers


- Bruises
 - Fractures
 - Head trauma
 - Skin trauma: lacerations, abrasions
 - Strangulation
 - Pressure Sores
- 





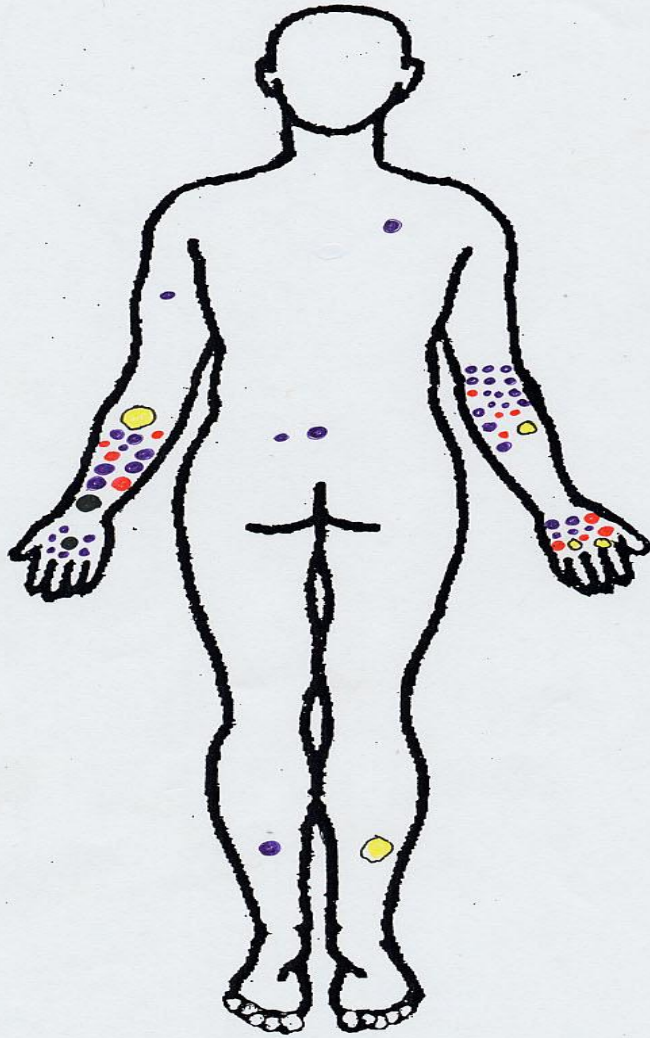
Bruising Study

A survey of 101 seniors was conducted on a daily basis (up to 6 weeks) to document the occurrence, progression and resolution of accidental bruises that occurred during the observation period.

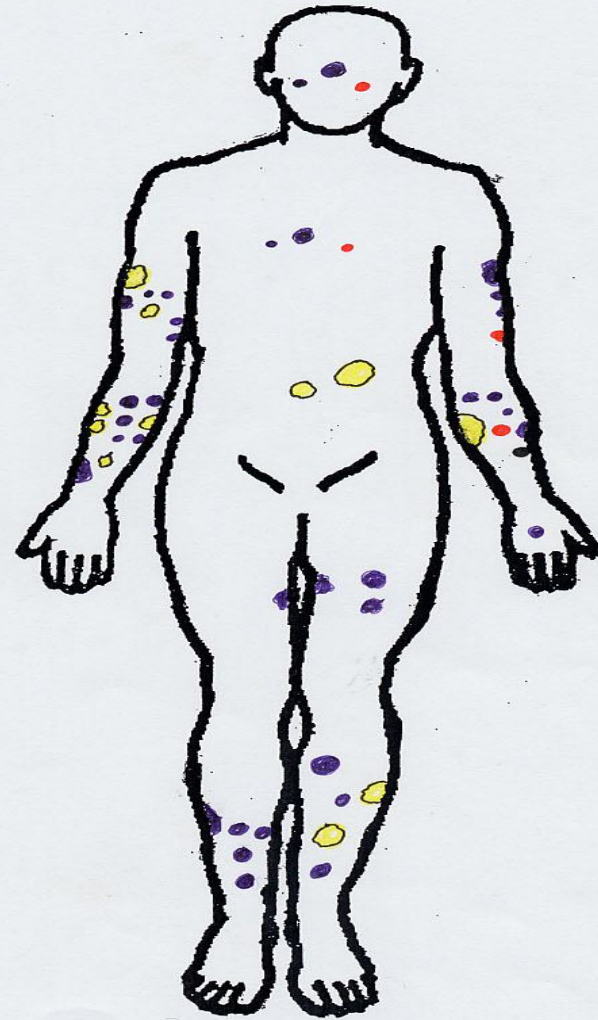


The life cycle of bruises in older adults.
J Am Geriatr Soc. 2005 Aug;53(8):1339-43.

Location of Bruises



Posterior



Anterior

(108 bruises at Day 1)

Summary of Results

- 90% on the extremities
- No bruises on the neck, ears, genitalia, buttocks, or soles
- More likely to know cause if on the trunk
- 16 bruises predominately yellow within the first 24 hours of onset
- If on medications known to impact coagulation pathways, then more likely to have multiple bruises

Bruising Associated With Physical Elder Abuse

Who participated:

- 67 older adult APS clients seen within 30 days of a physical abuse incident
- Compared with 101 older adults from the earlier accidental bruising study

[Bruising as a marker of physical elder abuse.](#)

J Am Geriatr Soc. 2009 Jul;57(7):1191-6. Epub 2009 Jun 3.

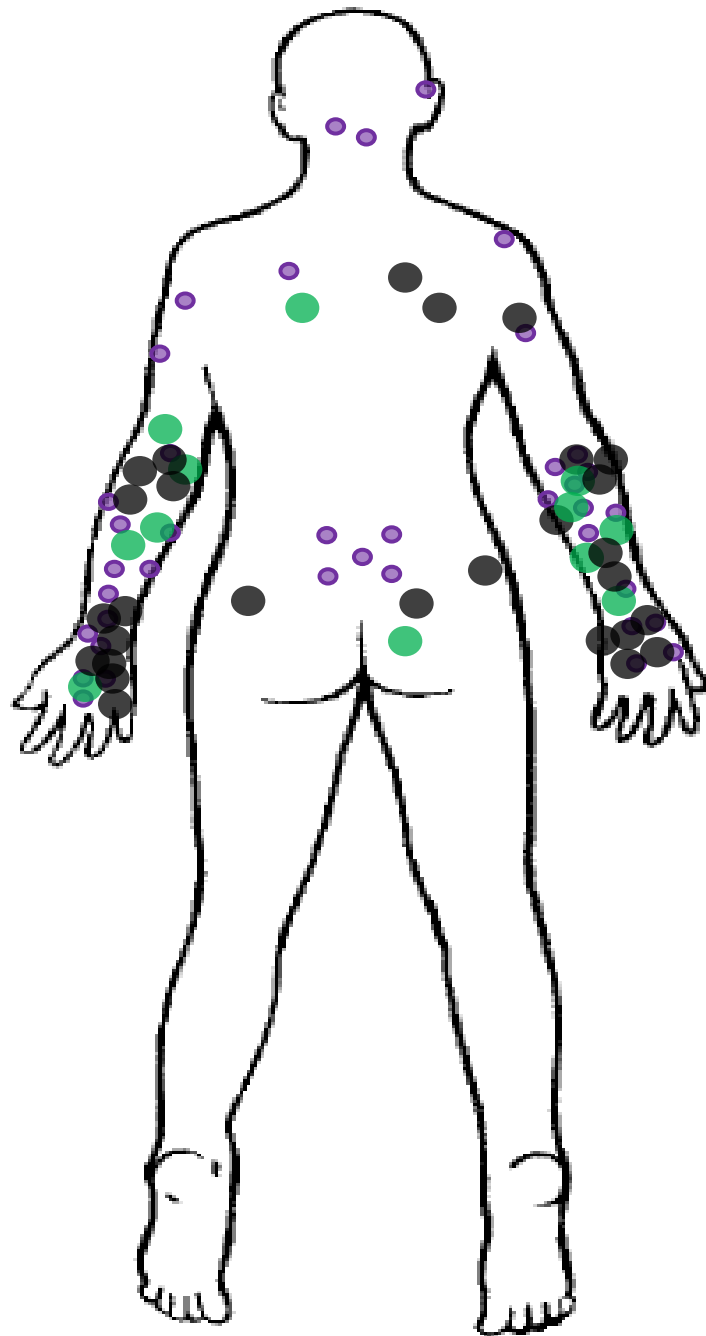
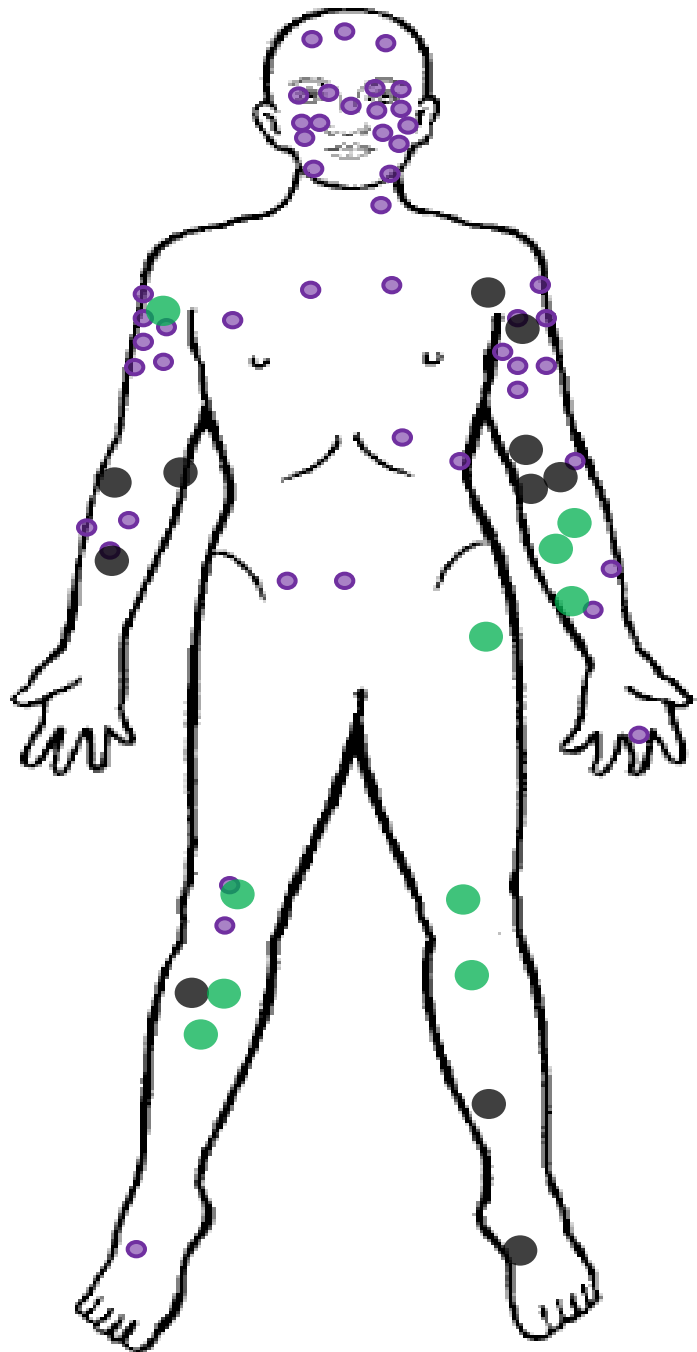


- Location

- More likely to indicate abuse: head/neck, chest abdomen, buttocks, palms and soles, ears
- Multiple planes: front/side of neck, inner/outer aspect of arm


- Timing

- Deep bruises may take days to appear
- 






Findings

- Inflicted bruises are larger
 - (At least) 72% of physically abused older adults had bruises
- 

Findings: Remembering bruises

- 24.8% of non-abused elders with bruises remembered the cause of their bruises
- 89.6% of abused elders remembered the cause of at least one bruise


National Institute of Justice 2005-IJ-CX-0048

- 
- Guidelines help to assess whether physical findings are suspicious for abuse.
 - Field experience shows that if a finding is suspicious but is not a result of abuse, there is a reasonable story to explain the injuries.



Strangulation

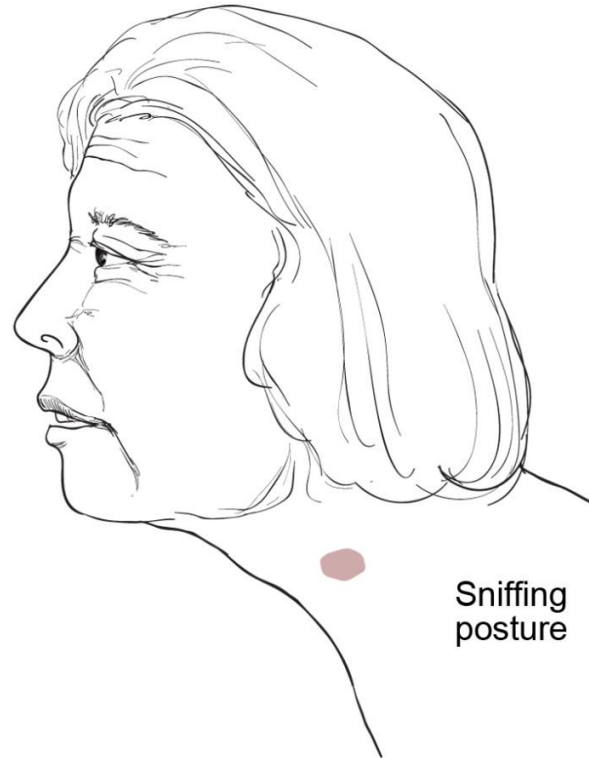
- Often missed
- Words are important: Avoid asking if the victim was strangled, rather, ask about 'choking', or someone placing their hands around the neck.
- Clues may be a hoarse voice, 'sniffing position', or physical signs around the neck and face.

- 
- Signs of strangulation:
 - Neck- Ligatures, hand prints, no marks
 - Face- petechiae, other injuries
 - Head- bruises, swelling

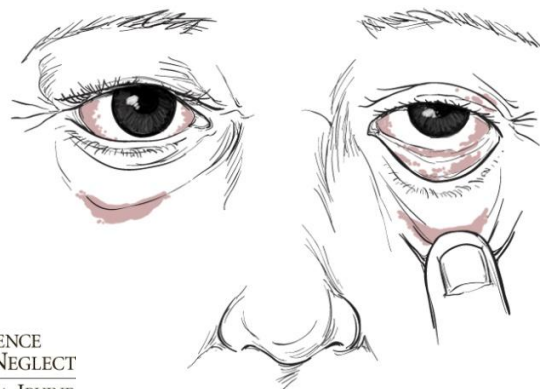
Strangulation Indicators



Fingermark or ligature
contusions on neck



Sniffing
posture

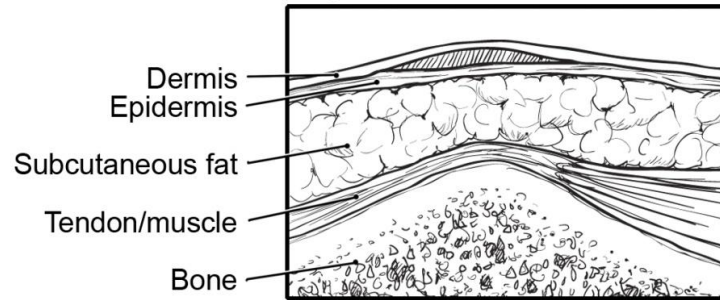


Eyelid and
cheekbone
petechiae

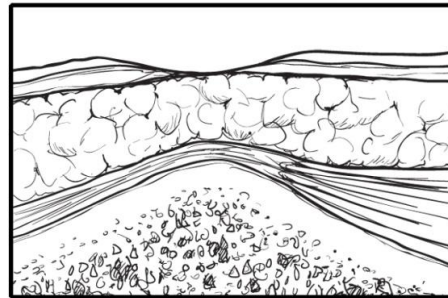


Stages of Pressure Sores

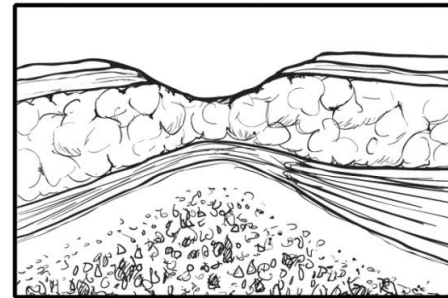
Stage 1



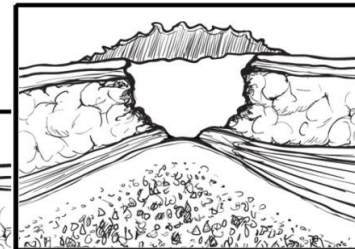
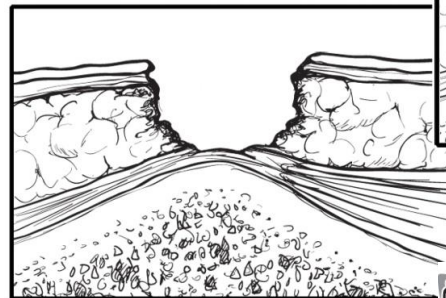
Stage 2



Stage 3



Stage 4




Stage 4
with a scab

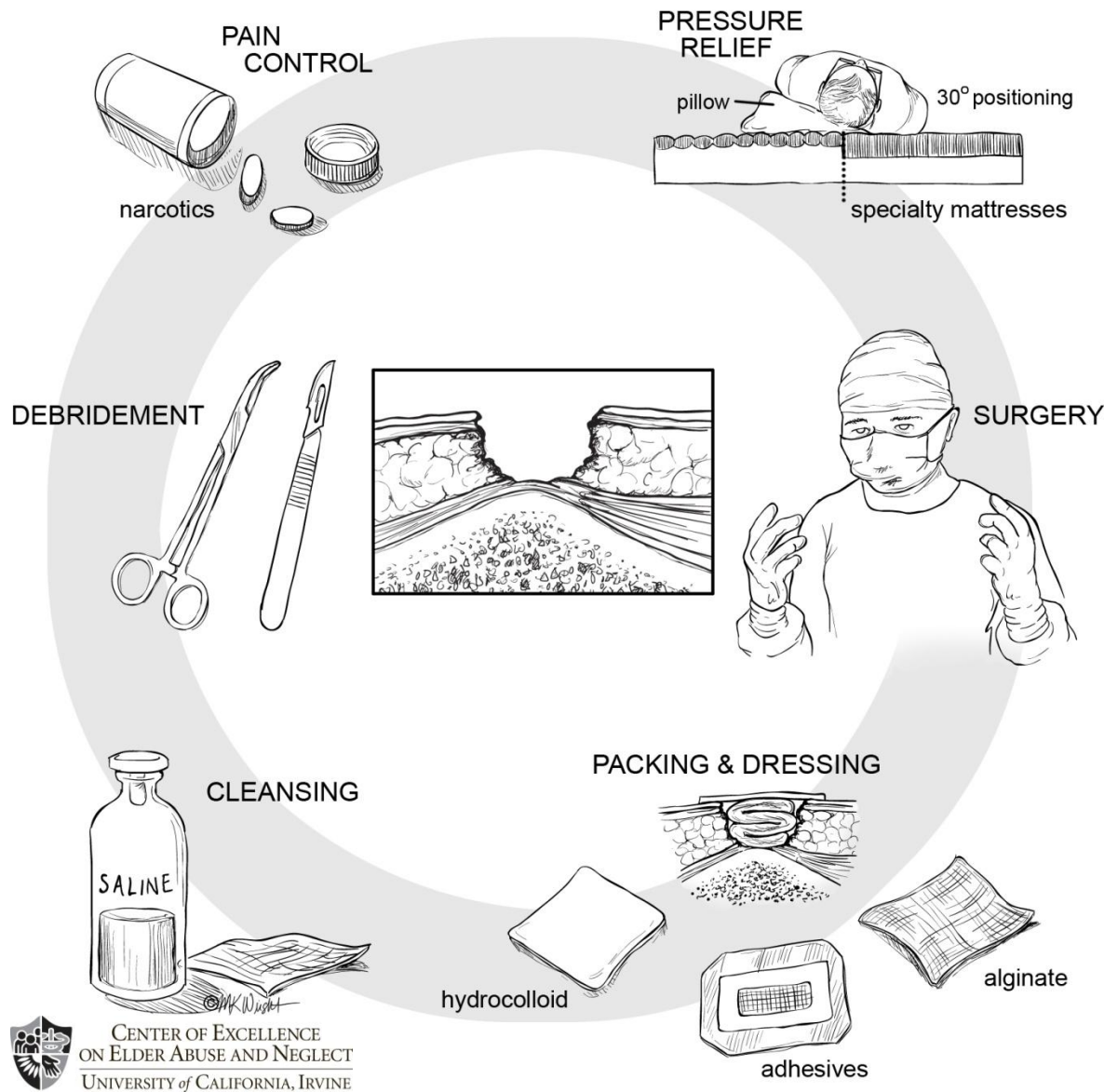
©MK Wiskit



CENTER OF EXCELLENCE
ON ELDER ABUSE AND NEGLECT
UNIVERSITY of CALIFORNIA, IRVINE


- 
- Although ulcers are injuries to the skin, they are associated with elder abuse neglect rather than physical abuse.
 - They are common, but often preventable, and definitely treatable.

COMMON TREATMENTS FOR PRESSURE SORES



Emotional Memory in Patients with Dementia

- Persons with dementia are vulnerable to mistreatment, such as elder physical or financial abuse
- They are often no other witnesses to these events
- They are not believed by
 - Family
 - Health care providers
 - Police
 - Prosecutors

- 
- There is evidence that persons with dementia may remember significant emotional experiences
 - Research is needed to better understand if persons with dementia are reliable reporters to their own 'emotional' life events

Conclusions

- A significant subset of persons with mild to moderate dementia were able to reliably report on emotionally-influenced life event memories.
- The findings indicate that a hierarchical interview can show which persons with dementia remember emotional events in their lives
 - Funded by National Institute of Justice