MEDICAL MARKERS OF ELDER ABUSE

Laura Mosqueda, M.D.
Chair and Professor of Family Medicine
Director of Geriatrics
University of California, Irvine School of Medicine
Overview of today’s talk

- Review of normal, common aging
- Relationship between aging and abuse
- Medical markers
  - Bruising
  - Strangulation
  - Fractures
  - Burns
  - Pressure sores
  - Cultural practices that resemble physical abuse
- Medications and mistreatment
Age-Related Changes

- Normal changes of aging
- Multiple co-morbidities
- Medication effects
- Cognitive impairment
An Organ Recital
Normal & Common Changes

1) Renal: decrease in creatinine clearance

2) Integument (skin)
   - thinner epidermis
   - capillary fragility
   - Less elasticity

3) Sensory system
   - Presbycussis (hearing loss)
   - slower reaction time
   - macular degeneration, cataracts
Normal & Common Changes

4) Musculoskeletal
   - Sarcopenia (loss of skeletal mass)
   - osteopenia/osteoporosis

5) Cardiovascular
   - orthostatic hypotension (dizziness upon standing)
   - congestive heart failure

6) Function
   - gait/falls
   - ADLs
Effects of Decrease in Reserve

- Greater susceptibility to illness
- More difficulty in recovering from illness
- Sensitivity to side effects of medication
- Vulnerability to abuse
Age-related changes make older adults more vulnerable to abuse

- Difficulty defending oneself
- More likely to get injured

- May require more care
  - Cognitive
  - Physical
Age-related changes may mask or mimic signs of abuse

- Bruises
- Fractures
- Pressure sores
Assessment

- History
- Physical
- Mental status exam
- Laboratory
Assessment

- History
- Physical
- Mental status exam
- Laboratory
Red Flags: Possible Mistreatment

- Implausible/vague explanations
- Delay in seeking care
- Unexplained injuries - past or present
- Inconsistent stories
- Sudden change in behavior
The importance of context
Contextual Issues

- Circumstances/Events leading up to the alleged abuse
- Delay in seeking care
- Lack of concern on the part of the caregiver
- Medical history
- Interactions between patient and caregiver
- Cognitive capacity
- Cognitive/behavioral changes
- History of medical care
  - Preferences
  - Follow up
Observations

- Interaction of the alleged victim and perpetrator
- Behavioral indicators of state of mind
  - Withdrawal
  - Fear
  - Confusion
Clues on Physical Exam: Neglect

- Pressure sores
- Poor hygiene
- Unkempt appearance
- Poor foot care
- Low weight
- Dehydration
- Body language of patient
Clues on Exam: Physical Abuse

Types of Injuries
- Bruises
- Fractures
- Burns

What to look for
- Location
- Hx consistent with exam?
- Old injuries
- Delay in seeking care
Bruising results from blunt forces:

Either a body part hits something harder than itself

OR

A harder object hits a body
Bruises

- Most common
- Hard to tell what’s abuse and what’s not
Bruising

- Age-related changes
- Medications
- Dating by color
- Multiple stages of healing
- History consistent with injury?
- Location
Blood follows gravity, so sites of bruising may be away from site of impact-ectopic bruising
Bruising

- 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 (e.g., cuomadin), then more likely to have multiple bruises
Location of Accidental Bruises

Posterior

Anterior
Location of Bruises Caused by Abuse
Bruising II

- (At least) 72% of physically abused older adults had bruises.

- Of 155 bruises found, they reported that (at least) 89 were inflicted, 26 accidental and 40 unknown.
When is bruising suspicious trauma versus accidental trauma? Which looks more like abuse: A or B?
Accidental or Inflicted? You decide
Accidental or Inflicted? You decide
Notes About Inflicted Bruises

Inflicted bruises are larger. Size matters! Be suspicious if over 5 cm.

Abused elders are more likely to have bruises on head, neck, lateral right arm. Pay attention to location!

People who were abused are much more likely to remember how they got the bruise. Ask!
Strangulation: signs are often missed

- Petechiae located inside the eyelid.
- Pronounced petechiae in the whites of the eyes and on the cheeks/face.
Signs of Strangulation

- Difficulty breathing
- Hoarse voice
- “Sniffing position”
- Ask: Did he/she choke you? Did you lose consciousness?
- Can be a medical emergency
Fractures

- Accidental or abusive
- May be due to medical condition
  - Osteoporosis
  - Cancer
- Many types of fractures
- Correlate fracture type to mechanism of injury
Fractures

- Spiral fractures or fractures with a rotational component are suspicious.
- Sites other than hip, vertebra, or wrist may more likely be markers of abuse.
Burns

- Persons over the age of 65 have 2X the national average death rate due to burns
- Seen in physical abuse, neglect and self neglect
- Limited studies reveal that between 36-70% of burns in adult abuse were due to abuse or neglect (Bowden 1998; Burns 1998)
When is it abuse?
Pressure Sores

- common
- often preventable
- usually treatable
Pressure Sores: Contributing Factors

- **Nutritional status**
  - Able to get own food?
  - Able to feed self?

- **Mobility status**
  - Never moved
  - Tied down in one position
Pressure Sores

- Causes
  - Pressure
  - Friction
  - Shearing
  - Moisture

- Stages (I-IV)
Decubitus ulcer – Stage II
What stage is this pressure sore?
Laboratory tests

- Malnutrition
- Dehydration
- Bleeding times
- Medication levels
Other Physical Findings:
Not Necessarily Physical Abuse

- Cultural practices
  - Cupping
  - Coining
Cupping
Context: Cupping or Octopus Attack?
Coining
Medications: their role in mistreatment

Can be
- **Overused**: to sedate, cause delirium
- **Underused**: to reduce mobility (e.g., L dopa), cause illness exacerbations (insulin, inhalers, antibiotics)
- **Misused**: used for unapproved effects (antihistamines to sedate)
Medications must be recorded

APS workers and others should record all medications taken by the client, including the following information:

- name
- prescribed for (if indicated)
- frequency
- dosage
- expiration date
Talking to Doctors

- Concise recount of the story
- Medical history and medical records (including labs)
- Medications (EVERYTHING!)
  - Rx
  - OTC
- Estimate of cognitive status