

Markers of Physical Elder Abuse and Neglect

Transfer of Learning Workbook

By Kevin Bigelow

An Adult Protective Services worker will investigate and encounter various types of abuse including physical abuse. It is important that the APS worker be aware of injuries and indicators of injuries; and that they are able to assess what the client is saying about their injuries in the light of the injuries or symptoms that can be observed. Regardless of the initial allegation that begins the investigation, workers must always assess for physical abuse. The eLearning, *Markers of Physical Elder Abuse and Neglect*, developed by the Center of Excellence at the University of California at Irvine will provide valuable information on physical abuse, the types of injuries that may be caused by physical abuse, how to identify these injuries, and

- symptoms that may accompany these types of abuse.

Supervisor Activities

The following pages offer information and activities to enhance the learning experience of participants that have completed the Markers of Physical Elder Abuse and Neglect eLearning. The supervisor may want to review the eLearning to refresh the concepts from the eLearning and to obtain additional information or resources to expand on concepts or skills that will benefit the workers skill set in working physical abuse and identifying its signs and symptoms.

Suggested Resources

Forensic Markers of Elder Abuse [Video lecture series episode]. Mosqueda, L. (Writer and presenter). (2008). In University of California Television

how to assess for physical abuse when interviewing a client.

After completing the *Markers of Physical Elder Abuse and Neglect* eLearning, and through the use of this workbook, participants will be able to:

- Define Physical Abuse and be able to identify various types of injuries as potential indicators of abuse
- Identify the findings of the UCI Bruising Study and the implications that this may have for abuse investigations
- Identify various types of physical injuries as well as the symptoms that may accompany various injuries
- Identify symptoms and injuries that may constitute medical emergencies and may require immediate action of the part of the worker
- Identify other types of physical abuse and the signs and

(Executive producer), UCTV Coming of Age Series. Available from <http://www.uctv.tv/search-details.aspx?showID=14376>

A Multi-site Study to Characterize Pressure Ulcers in Long-term Care under Best Practices: Final Technical Report for the U.S. Department of Justice. August 2010. Liao S, Baker M, Lowe J, Austin R, Whitney JD, Wiglesworth A, Zimmerman D, Zoromski P, Mosqueda L. Available from <http://www.ncjrs.gov/pdffiles1/nij/grants/231614.pdf>

The life cycle of bruises in older adults. Mosqueda, L.; Burnight, K.; Liao, S. (2005). Journal of the American Geriatrics Society 53(8), 1339-43.

Physical Elder Abuse

In assessing for physical abuse, it is important to be able to differentiate between signs of physical abuse and common age related changes. An important consideration in determining if an injury may constitute physical abuse includes evaluating the history that the client or caregiver provides and comparing it to the injuries or injury related signs and symptoms. While some injuries may be visible, others may not be so obvious. In order to make an assessment of these two areas of consideration, including their interrelationship and whether physical abuse may be involved; it is necessary to have a basic understanding of aging and medical conditions in older adults.

Taking a History

Obtaining an accurate history is critical to investigating all types of elder abuse. As much specific information as possible should be obtained from the client, the caregiver, and any other witnesses available. Important information and 'clues' can be derived from the history you obtain. When interviewing elderly clients, injuries are often blamed on a fall. Unfortunately, this explanation for injuries is often given even when the injuries are the result of abuse.

Some of the important considerations, or 'clues' received from a detailed history include:

Noncompliance	May indicate a lack of follow through with medical care or social work interventions
Vague/Unlikely Explanations	May indicate that the client is hiding something, or is confused or having memory difficulties
Delay in seeking care	May be an attempt to conceal injuries, because of noncompliance, or cognitive difficulties
Unexplained injuries	May indicate that the client has been threatened, is afraid, or cannot recall what happened
Inconsistent stories	May indicate 'covering up' of significant details such as abuse or

Markers of Physical Abuse

	difficulty with self-care, as well as possible cognitive difficulties
Change in behavior	May have one or more of many precipitants including fearfulness, a change in medical status, a change in medications, or even cognitive difficulties
Observe for fear, confusion	During the interview the interviewer should pay close attention to the client's affect and watch closely for signs of anxiety, fearfulness, or confusion

The interview process requires the full attention of the interviewer as they must not only ask the appropriate questions and pursue a line of questioning that may relate to the client's ability to care for themselves as well as their safety; but must also be aware of behavioral or non-verbal cues such as anxiety, fearfulness, limited attention span, or hallucinations. In situations where there may be multiple parties that will need to be interviewed, or where it may be difficult to get the client or caregiver alone, the investigator may want to bring a co-worker along to help with interviewing, or to keep family members, caregivers, or others away from the client so that they can be interviewed alone and without distractions.

What is physical elder abuse?

Legal definitions of physical abuse may vary from state to state. Most states' definitions of physical abuse will include the following: Hitting, pushing, slapping, strangulation, force feeding, misuse of medications, abuse of restraints.

Activity #1: Identifying Physical Abuse

Answer the following questions related to physical abuse. This activity may be done as a group discussion, or done individually and discussed with a supervisor or other mentor.

1. Identify some examples of normal age related changes? (*wrinkling of the skin, reduced vision, thinning of the skin with slight bruising from normal activities, mild forgetfulness, slower gait when walking*)
How might the changes you observed be different from physical abuse related signs or symptoms? (*bedsores in immobile clients could indicate neglect by caregivers, cluster or pattern bruising that could indicate being grabbed or struck, inability to see due to broken glasses or lack of vision care, inability to remember day, date, time, or location or avoidance of questions due to fearfulness, a noticeable limp caused by an unexplained injury*)
2. If you are an experienced Adult Protective Services worker, identify three abuse related injuries you have encountered, and describe briefly how you were able to identify them as physical abuse (for new workers, imagine three possible scenarios that you could encounter).
3. How might you approach a new client that you are interviewing when you observe the following:
 - a. A 'black eye' (*it looks like you hurt your eye, can you tell me how that happened?*)
 - b. A hand shaped bruise on the arm (*that bruise on your arm looks painful. It looks sort of like a hand, whose hand would that be?*)
 - c. Bruising to the inner thigh (*I notice you have some bruising on you thigh, does it hurt? Can you tell me how you got those bruises?*)
4. How might a client display anxiety or fearfulness during an interview? (*some symptoms of fearfulness or anxiety could include: hypervigilance, perspiration, facial flushing, widening of the eyes, evasiveness, wringing of the hands, 'white knuckles' from gripping objects very tightly when anxious, stuttering-when not part of normal behavior, inability to sit still, attempts to change the subject*)
5. Provide one brief example of each of the following types of abuse:
 - a. Hitting, pushing, or slapping (*striking someone with a closed fist or other body part, striking with an open hand, forcibly pushing against someone to intimidate them, harm them, or make them fall*)
 - b. Strangulation (*squeezing of the neck and throat using hands or other objects*)

- c. Force feeding (*forcing food down a victim's throat against their will. This can be done with food or through a tube and may involve pushing food down the throat, holding the nose to prevent breathing until the victim swallows, or forcing excessive amounts of fluids or liquid food down the victim's throat through a tube when they do not want it.*)
- d. Misuse of medications (*the use of medications to silence a victim, to isolate them from others, to obtain their compliance, or to do them harm*)
- e. Abuse of restraints (*use of restraints when they are not required for the safety of the client or as a punishment for undesirable behavior, or to prevent them from communicating with others*)

Bruising

Bruising is a common symptom related to physical abuse. This bruising comes from blood vessels bleeding under the skin. The body's system of blood vessels has been compared to the branches of trees with larger branches connecting to smaller and smaller branches.

Types of Bruising

There is a tendency to refer to most changes in skin color as a result of trauma as 'bruising'. In reality, there are various terms for these injuries. Here are some of the types of bruising that are often seen:

Ecchymosis-This the term that describes common bruising. It is formed when blood vessels rupture and leak blood into surrounding tissues. It is always caused by blunt force. There is also normally a color progression.



Purpura-bruising or discoloration of the skin caused by accidental injuries to thinning skin or aging skin and vessel fragility due to connective tissue damage caused by chronic sun exposure. In older persons, these types of purpura may be seen as purple/red bruises and brown skin discoloration. The bruises occur from accidental,

even very minor, blunt force, because of the vessel fragility in the skin. Purpura are usually 3-10mm in diameter.



Petechia

Discoloration of the skin, usually less than 3mm in diameter.

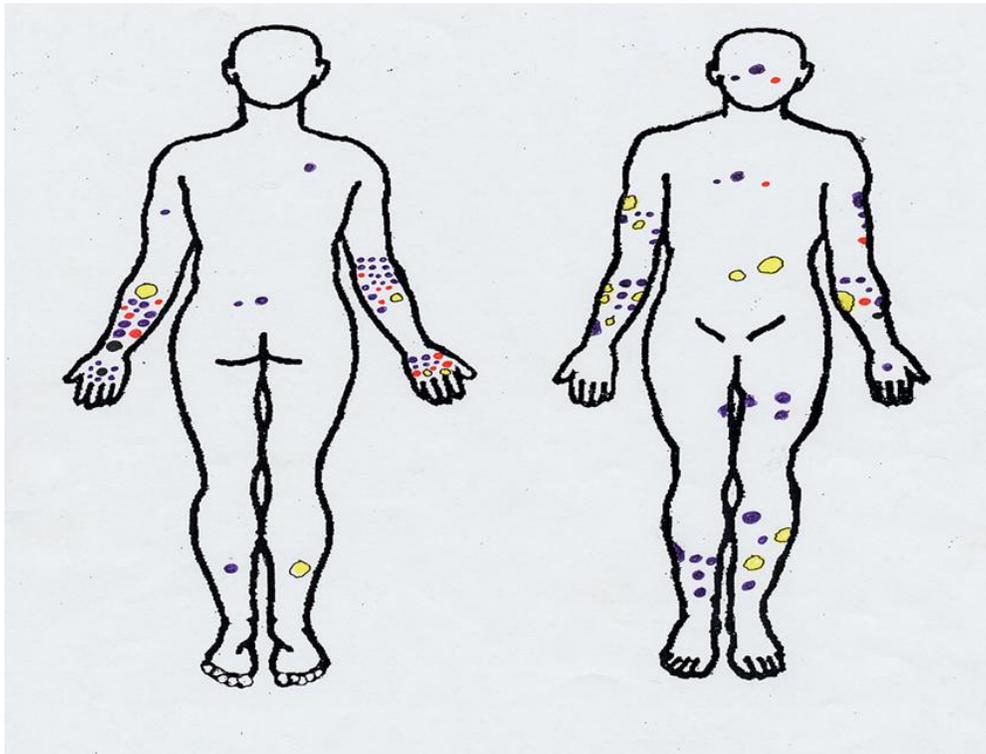
Some facts about bruising:

- Bruising is caused by blunt force; either a body part hits something harder than itself, or a hard object hits the body part.
- The deeper or harder the trauma that causes the bruising is, the deeper the bruise will be.
- The skin is not the only body part that can be bruised. Any body part can be bruised, including the heart or lungs. Heart or lung bruising would be called a contusion.
- In bruising, blood vessels bleed. Since blood follows gravity, blood lost from vessels may accumulate elsewhere, causing bruising to occur away from the site of the impact. For example, a blow to the side of the face might result in blood pooling on the front of the face or under the eye.
- If someone is hit very hard, and the resultant bruising affects deep tissue, it may take some time (perhaps days) before a visible bruise appears on the skin.

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- In older adults, the color of bruises may vary widely over time. Because of this, it is not accurate to use the color of a bruise to determine how old it is (although it is still important to document the color of any bruising you see).

Location of Bruises*



*From the UCI Accidental Bruising Study

Bruising Study

Part I

Although little research on bruising has been done, the University of California at Irvine conducted a study on accidental bruising in 2002.

Over the course of the study, 101 seniors were evaluated daily for accidental bruising over a period of six weeks to

document the occurrence, progression, and resolution of bruises. A total of 108 bruises were identified and observed during that time.

The chart above shows the bruising that was tracked during the study. Most of the bruising (90%) observed during the study occurred on the front and back of the arms, and the legs. Very few accidental bruises were found on the back, stomach, or chest. During the study there were no

accidental bruises found on the neck, ears, genitalia, buttocks, or the soles of the feet of the study participants. 16 bruises were found to be predominantly yellow in color within 24 hours of when they were received, contradicting the often held belief that all bruising goes through stages of color change from blue, to purple, to yellow.

Another interesting and significant fact that emerged from the study was that among the study participants, the causes for injuries to the trunk, such as bruising to the chest was usually remembered, while bruising to limbs is common, and the reason for the bruising often forgotten. Another important note about assessing injuries from the study; while it is always important to know if the client is on anticoagulant or 'blood thinning' medication, these medications have little to do with the actual location of bruising.

Bruising Study

Part II

Part II of the bruising study looked at bruising in older adults as reported by abused elders. In this part of the study, UCI researchers studied 67 older adult APS clients seen within 30 days of a physical abuse incident. Researchers then compared the injuries of these 67 seniors to the injuries of the 101 persons from the accidental bruising portion of the study.

The results of this ground breaking two part study were as follows:

Size of bruising

- Inflicted bruises tend to be larger than accidental bruises
- (At least) 72% of physically abused older adults had bruises

Memory of bruising

- Only 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

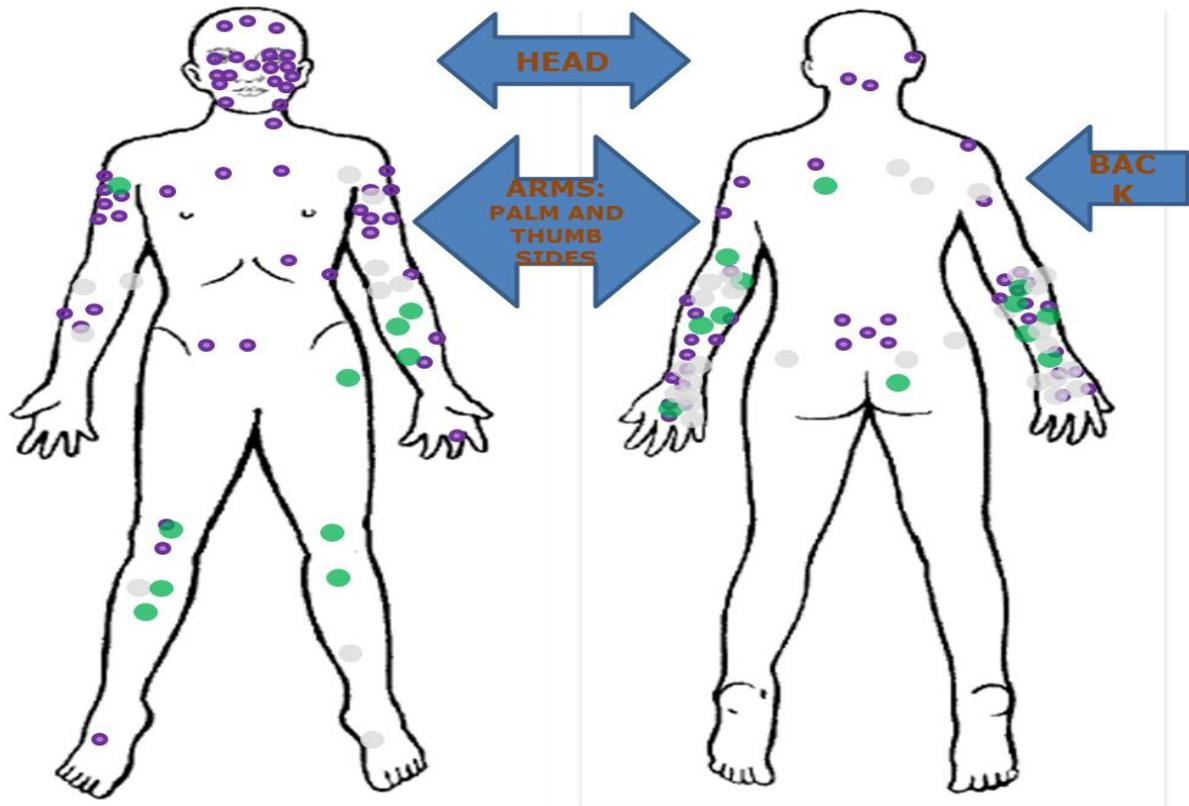
Location of abusive bruising

- Bruises were more likely to indicate abuse when found in the following areas: head/neck, chest, abdomen, buttocks, palms and soles, ears
- Abusive bruising was often found on more than one plane of the body: front/side of neck, inner/outer aspect of arm (in other words-bruising might likely be found on the front and side of the neck or both the inner and outer sides of the arm)

Timing and coloration of bruising

- Deep bruises may take days to appear (the results of physical abuse may not produce bruising for days afterward)

Markers of Physical Abuse



- Unknown f=39
- Accidental f=23
- Inflicted f=93

Activity #2: Memory Quiz Activity (answer sheet)

Answer the following questions based on the information presented in the eLearning and on the preceding pages.

1. Bruising is caused by blunt force; either a body part hits something harder than itself, or _____.
 - a. A hot object burning the skin
 - b. A grooved object scraping the skin
 - c. A hard object hits the body part
 - d. A mole may turn into a bruise
2. The deeper or harder the trauma that causes the bruising is, _____.
 - a. the deeper the bruise will be
 - b. the harder the bruise will be to see
 - c. the more likely it is that the injured person will not remember it
 - d. the less likely that it is caused by abuse
3. In older adults, the color of bruises _____.
 - a. will always appear immediately after the injury
 - b. will always follow the same pattern of color change over the same time period
 - c. will differ depending on whether the injury is abuse or not
 - d. will vary widely over time
4. Bruises were more likely to indicate abuse when found in the following areas:
 - a. on the back, knees, trunk, and hands
 - b. on the scalp, back, ankles, and shoulders
 - c. on the head & neck, chest, abdomen, buttocks, palms and soles, and ears
 - d. on the face, arms, ankles, hands, and feet

True or False

5. The skin is the only body part that can be bruised. True or False
6. Bruising will only occur at the immediate point of impact. True or False
7. If someone is hit very hard, and the resultant bruising affects deep tissue, it may take some time (perhaps days) before a visible bruise appears on the skin. True or False
8. In the UCI bruising study, inflicted bruises tend to be larger than accidental bruises. True or False
9. In the UCI bruising study, the majority of physically abused adults did not have bruising. True or False
10. In the UCI bruising study, more abused older adults remembered the cause of their injuries than non-abused older adults did. True or False

11. Abusive bruising was often found in more than one plane of the body (for example- on the front and side of the neck, or on the inner and outer aspect of arm). True or false

Activity #2: Memory Quiz Activity

Answer the following questions based on the information presented in the eLearning and on the preceding pages.

12. Bruising is caused by blunt force; either a body part hits something harder than itself, or _____.
 - e. A hot object burning the skin
 - f. A grooved object scraping the skin
 - g. A hard object hits the body part
 - h. A mole may turn into a bruise
13. The deeper or harder the trauma that causes the bruising is, _____.
 - e. the deeper the bruise will be
 - f. the harder the bruise will be to see
 - g. the more likely it is that the injured person will not remember it
 - h. the less likely that it is caused by abuse
14. In older adults, the color of bruises _____.
 - e. will always appear immediately after the injury
 - f. will always follow the same pattern of color change over the same time period
 - g. will differ depending on whether the injury is abuse or not
 - h. will vary widely over time
15. Bruises were more likely to indicate abuse when found in the following areas:
 - e. on the back, knees, trunk, and hands
 - f. on the scalp, back, ankles, and shoulders
 - g. on the head & neck, chest, abdomen, buttocks, palms and soles, and ears
 - h. on the face, arms, ankles, hands, and feet

True or False

16. The skin is the only body part that can be bruised. True or False
17. Bruising will only occur at the immediate point of impact. True or False
18. If someone is hit very hard, and the resultant bruising affects deep tissue, it may take some time (perhaps days) before a visible bruise appears on the skin. True or False
19. In the UCI bruising study, inflicted bruises tend to be larger than accidental bruises. True or False
20. In the UCI bruising study, the majority of physically abused adults did not have bruising. True or False
21. In the UCI bruising study, more abused older adults remembered the cause of their injuries than non-abused older adults did. True or False

22. Abusive bruising was often found in more than one plane of the body (for example- on the front and side of the neck, or on the inner and outer aspect of arm). True or false

Pattern Injuries

Injuries with unnatural shapes may provide clues as to the object that inflicted the injury. Electric extension cords, clothing hangers, belts, or ropes may leave distinctive injuries. Noting and documenting the size, shape, and color of injuries is important; as well as photographing the injury (with the client's permission). Specific interventions as well as possible criminal charges may be impacted by clear descriptions and evidence of injuries.



Notice the red double line on the knee and lower leg ending in a curved double line. This person was hit with a plastic clothes hanger.

Head Trauma

Trauma to the head can be particularly dangerous, and injuries may display in unusual forms. Trauma to the head may result in obvious swelling and/or bruising. The tissue over the skull may swell, and bruise. In addition to this, further injuries may not become apparent for days, and may present differently from other injuries. The deeper the injury, the longer it may take to appear.

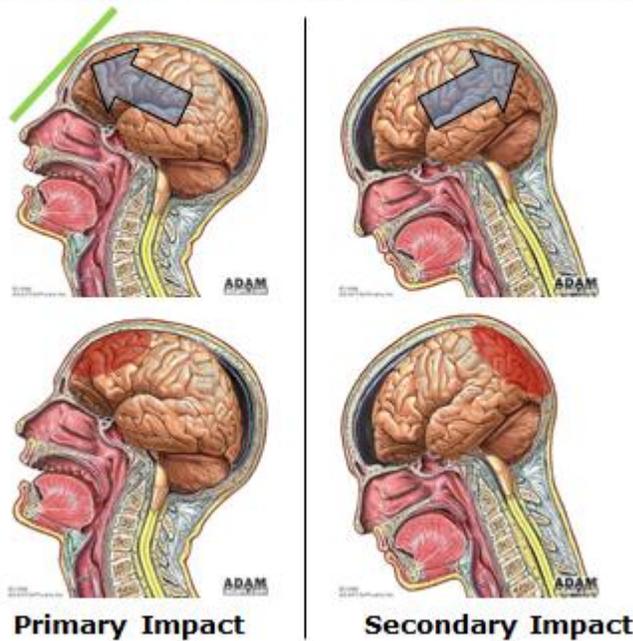
Coup Injuries

Injuries resulting from head trauma may affect the brain directly. When the head is struck, the brain may be thrown in the direction of the impact, causing bruising and possible bleeding to the brain. When the bruising or bleeding takes place on the side of the skull where the impact took place, this is called a Coup injury. This type of bruising to the brain may be very serious and warrants immediate medical attention.

Contra Coup Injury

Similar to a Coup injury described above, a Contracoup injury may occur when the brain is suddenly jarred forward, then snaps back in the opposite direction inside the skull. This may result in bruising or injury to the side of the brain opposite where the impact took place.

Coup/Contra Coup (Contrecoup) Injury



+ Medical Emergencies

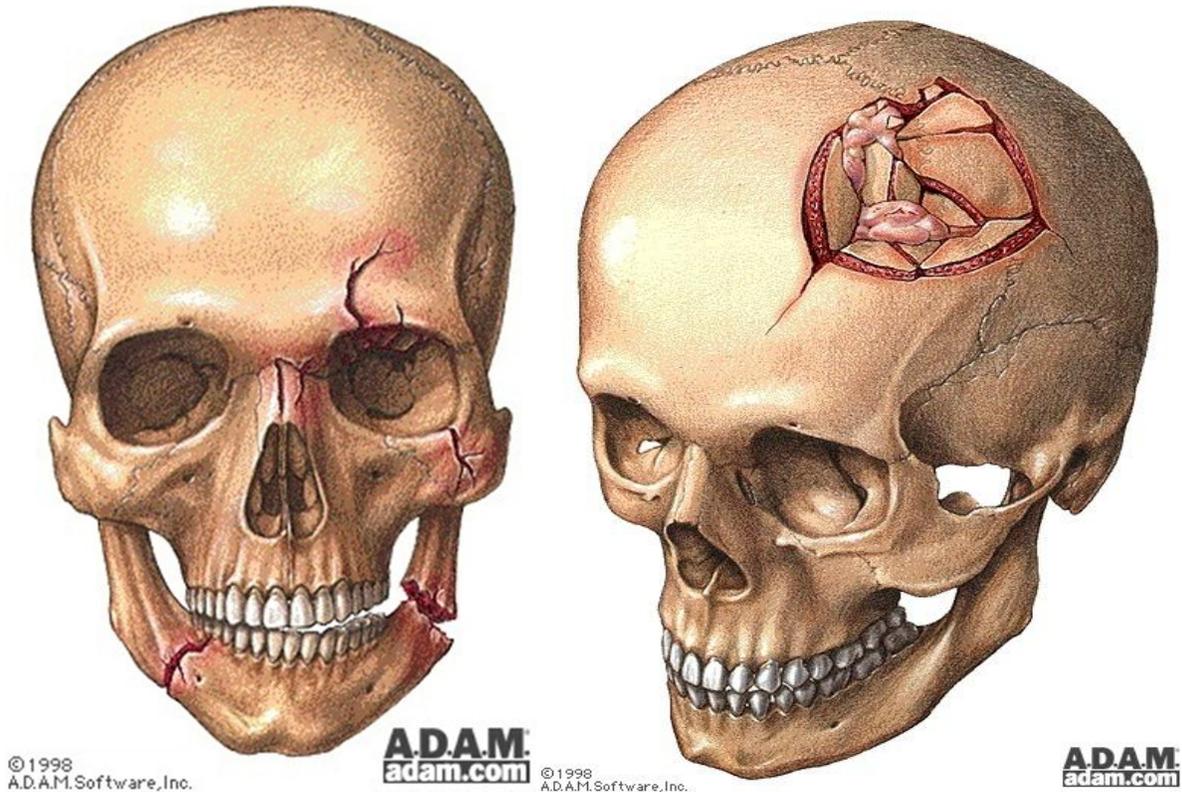
Bleeding in the brain or subdural hematoma are very serious injuries and require medical attention immediately. As field workers, you should be able to recognize the signs and symptoms of possible head trauma and take immediate action. When possible serious head trauma has taken place, paramedics should be called immediately. Signs and symptoms of possible head trauma include:

- Head Injury
- Fluid from the nose or
- Confusion
- Unwitnessed
- Headache

ears Skull Fractures

head/facial injury

Skull fractures may take place in various structures of the head, not just the cranium. Skull fractures may happen to the eye orbits, the nasal structures, or the zygomatic process (cheek bone) as well as to the jaws. The photo below left shows examples of several types of skull fractures.



The illustration above right depicts a depressed skull fracture. This type of injury may be caused by being hit with a heavy object such as a hammer. Depressed skull fractures are particularly serious as they require surgery to remove bone fragments and allow room for brain swelling after the injury.

Some signs and symptoms of possible skull fractures include:

- External signs of injury may not appear for 1-3 days
- Bruising may be bilateral (on both sides) although the original injury was one-sided
- Bruising over the mastoid (the part of the skull behind and below the ear); "Battle Sign" a bruise behind the ear may indicate a temporal bone fracture
- Bruising to both eyes (called raccoon eyes) may be visible with skull fracture

Markers of Physical Abuse

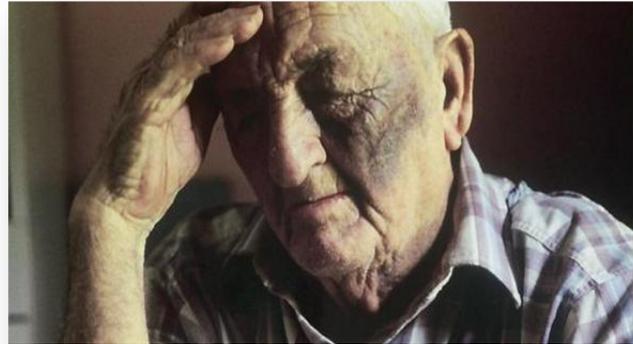
Activity #3: Matching (answer sheet)

Match the term at left with the best choice from the words or phrases on the right.

- | | |
|--------------------------------|---|
| __K__ Pattern Injury | A. Bleeding in the brain |
| __F__ Deep injury | B. 'Cheekbone' |
| __M__ Coup Injury | C. Bone pushed into the skull by a blow |
| __L__ Contra Coup Injury | D. Bruising |
| __A__ Subdural Hematoma | E. Discoloration, usually 3-10mm in diameter |
| __B__ Zygomatic Process | F. May take 1-3 days for bruising to appear |
| __C__ Depressed Skull Fracture | G. Fluid from the ears or nose |
| __G__ Skull fracture symptom | H. Discoloration, less than 3mm in diameter |
| __D__ Ecchymosis | I. Located behind/below the ear |
| __E__ Pupura | J. Discoloration behind/below the ear |
| __H__ Petechiae | K. Injury that shows the object shape that caused it |
| __I__ Mastoid | L. Edema in the brain when brain rebounds against the skull |
| __J__ Battle Sign | M. Edema in the brain caused by the brain bouncing off of the skull on the traumatized side |

Blunt Trauma to the Face

Blunt trauma to the face will often cause bruising. A common facial injury is the bruising to the eyes or a 'black eye'. The accumulation of bleeding under the skin will discolor the area around the eye, and may 'run' down the face as the blood seeps to tissues below the actual injury site.



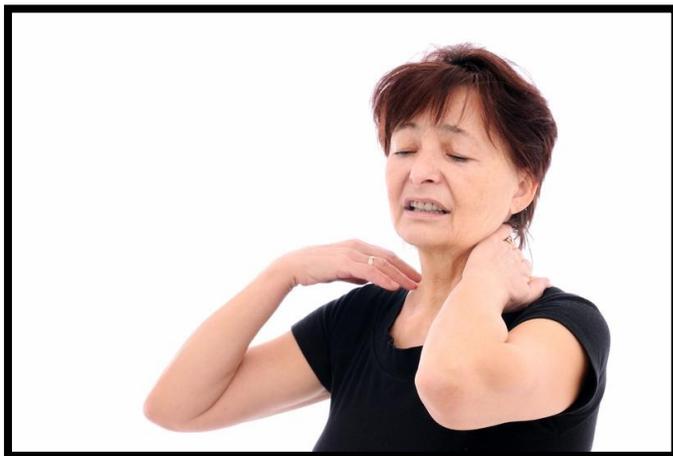
*Photo courtesy of Iowa Department on Aging Dependent and Elder Adult Abuse.

Strangulation

As traumatic as strangulation may be to a victim, strangulation is often missed in initial physical abuse investigations. One reason that this is missed may be the terminology used. Victims are more likely to recognize the term 'choked' or the description of someone putting their hands around the neck. Some signs of strangulation injuries include: a hoarse voice, a 'sniffing' posture (with the neck extended and the nose raised), and/or bruising to the face and neck. Other symptoms of strangulation may include ligature marks (if a rope for example was used to strangle the victim) and facial petechia caused by small blood vessel damage during the incident.

The mechanics of strangulation include occluding the veins and arteries through pressure on the neck. The veins are occluded first and blood backs up into the head. With increased pressure the arteries will be obstructed stopping the flow of blood

and oxygen. After approximately 10 seconds of this occlusion the victim will likely lose consciousness. After 1-4 minutes of strangulation, permanent brain damage, and eventually death will occur.



 Medical Emergencies

Even after a victim has survived an incident of strangulation or choking, they may be injured. If a victim is encountered soon after the choking incident, they may have serious injuries. If strangulation is reported or strongly suspected and the victim is displaying symptoms of difficulty breathing, a hoarse voice, or if they are assuming the 'sniffing position' (neck thrust forward and nose raised as when smelling a flower) then they may be having difficulty breathing and the paramedics should be called immediately.

Fractures

Fractures may be accidental or abusive. This means they may be the result of a fall or other accidental trauma; or they may have been caused by abuse. Fractures may be caused (or enabled) by medical conditions such as Osteoporosis (low bone mass leading to fragility and fractures) or as a side effect of some types of cancer or Paget's Disease. There are many different types of fractures. In addition to the report of the injured person, the type of fracture may provide a clue as to whether the fracture was accidental or inflicted.

Spiral fractures or fractures where the bone fractured because it was rotated or twisted should raise suspicions of possible abuse. In addition, fractures in areas other than the common fractures caused by falls (the hip, vertebrae, or wrists) may also be considered possible forensic markers.

Fractures in older persons tend to differ from the fractures of younger persons. While younger persons and children tend to fall forward, and often catch themselves with their hands, older persons may fall to the side or back; or they may not be able to put their hands up to stop themselves due to slower reaction time. A common fracture in older persons is a hip fracture. The hip may fracture in different areas of the hip, depending on the direction of the fall. Most hip fractures require surgery to heal. The client's physician may be helpful in identifying the nature of their fracture and may be able to corroborate (or cast doubt upon) a client's version of description of how they were injured.



Medical Emergencies

If a client has fallen, and presents with any of these symptoms, they may have broken their hip, and the paramedics should be called immediately:

- Difficulty walking
- Pain in hips or upper legs or knees
- One leg shorter than the other in the presence of pain
- Leg deformity

Burns

"Persons over the age of 65 have two times the national average of burns and we truly do not know how many are accidental and how many are caused by abuse, but some studies show that up to 36 to 70% are suspicious," (Bowden 1998; Burns 1998).

Peripheral Neuropathy and Burns

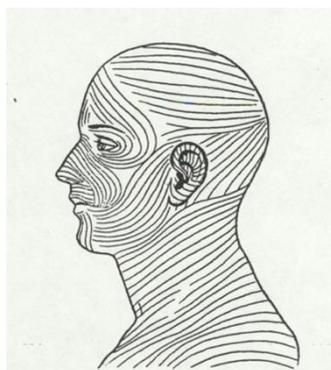
Some seniors experience a syndrome known as Peripheral neuropathy. This condition is often caused by diabetes. Persons suffering from Peripheral neuropathy often experience symptoms such as: numbness, tingling, burning sensations, and other symptoms in the hands and feet. Due to these decreased or masked sensations in their hands and feet, some seniors may incur serious burns or other injuries since they are unable to feel when their hands or feet are being burned or are otherwise injured. Although the percentage of accidental burns or other injuries versus intentional abuse is unknown, it is suspected that a large proportion and perhaps even a majority of these injuries may be abuse related.

Medical Emergencies

All acute burns are serious and require medical attention, even if they do not cover a large part of area of the body

Stab Wounds

Stabbing wounds may look very different. One determinant as to how a stab wound will appear has to do with the direction of the victim's Langer's Lines. These Langer lines are the natural lines of the skin that indicate how the skin fibers lie. Everyone has these lines (see the illustration below). A stab wound will look differently depending on whether the stabbing runs parallel or perpendicular the victim's natural Langer's Lines. If they are stabbed parallel to a Langer line, the incised wound will be smaller and will probably heal more efficiently. But, if they are stabbed perpendicularly to the lines, there will be a larger opening.



Langer's Lines

Other Physical Findings that May not be Abuse

While workers must always be observing for signs of possible physical abuse, it is important to remember that not all markers will necessarily indicate abuse. For example, there are several well-known treatments utilized by various ethnic groups as curatives that may leave marks similar to physical abuse. Some of these practices include:

Cupping- Is the application of heated cups to the skin, to create slight suction. Sometimes a red ring or deeper bruising will result.

Coining- Involves putting oil or ointment onto the skin and then taking a coin and rubbing it firmly in a linear pattern until marks appear. Usually the focus is along the spine and ribs.

Moxibustion- Involves burning dried Mugwort herb on or near the skin at specific acupuncture points. Sometimes burn marks or blistering will result.

Other Types of Physical Abuse

Although physical abuse may often involve striking, burning, or bruising the client's body, it is important to remember that physical abuse may take many forms. Some of these forms of physical abuse may include the following:

Misuse of Medications: The misuse of medications as physical abuse may include overmedicating clients to keep them quiet or unable to talk about the abuse that is happening to them, under-medicating clients to punish them when they are in pain, or to keep their pain medications for someone else to illegally use. Misuse of medications would include, for example, giving high doses of antihistamines to make to client groggy when the medication has been prescribed for other purposes.

Force feeding: Force feeding, meaning forcing food into someone's mouth and down their throat can be very dangerous, and may result in aspiration of the food where it goes directly into the client's lungs. This can result in aspiration pneumonia, a very serious condition. The consequences from force-feeding include discomfort, pain and aspiration (the inhaling of food or fluids into the lungs). If food is being forced down someone's throat, they can't prepare to swallow it. Swallowing involved a very complex pattern where muscles of the mouth and



the throat work together. The swallowing mechanism and reflexes are impaired in many medical conditions including stroke, dementia and Parkinson's disease, among others.

Restraints: Although there are strict regulations for hospitals and nursing homes with regard to restraints, many persons are restrained at home, by persons that are not familiar with restraints, or who may misuse restraints for their own purposes. Sometimes caregivers believe they are preventing their loved one from falling in the middle of the night, or restraining them 'for their own good', however, restraint use can be physical abuse as there are other, more humane ways to reduce wandering or the risk of falling at night. Unlike licensed facilities where the use of restraints requires that physicians must speak with powers of attorney for permission and a form is reviewed and signed every few days; restraint use at home may involve misuse of restraints. Misuse of restraints can constitute physical abuse. Workers should always ask caregivers about the use of restraints and evaluate for possible misuse of or injuries from possible misuse of restraints.

How to Talk to a Doctor

In the course of an investigation, workers will often need to speak to a client's physician.

Some physicians may be more open than others to discussing their clients. A signed release is often required for a physician to acknowledge or discuss their client. Some helpful hints that may help facilitate a discussion with a client's doctor include:

- Prepare for the call by having all of the facts you need and organize them so that you can express them logically
- State that you are concerned about the welfare of one of the physician's patients
- Don't assume they remember your client
- Identify the client and their relevant information up front. As an example: "Mrs. X is this is a seventy-seven-year-old woman with Parkinson's disease, and may be a victim of medication overdose."
- Be sure to thank the physician for their time, end the call when you have discussed what you needed to discuss, and be sure to leave the doctor your contact information in case they should have further information.



Working with Law Enforcement

Working with law enforcement professionals and other agencies requires some basic knowledge about these agencies in order to collaborate effectively. In addition to cross reporting requirements, knowing when to contact law enforcement for assistance is critical. When you are first learning to investigate abuse and neglect; or if a particularly complex case presents itself, it may be best to partner with elder abuse experts in your area. When interviewing clients, it is best to keep questions open ended such as: "I am here to make sure you are alright. Can you tell me what happened?" versus, "Did he push you?"

Become acquainted with other agencies and services in your area, and introduce yourself to them. Developing effective working relationships is very important when you are attempting to obtain vitally needed services or interventions.

Markers of Physical Abuse

Activity #4: Fill in the blanks using the words and phrases to the right. (answer key)

1. The blackening or bruising of both eyes in facial trauma or head injuries is sometimes call raccoon eyes.
2. The accumulation of bleeding under the skin will discolor the area around the eye, and may run down the face as the blood and paramedics should be called immediately. Fractures seeps to tissues below the actual injury site.
3. When interviewing clients where strangulation is suspected, clients are more likely to respond to questioning when terms such as choked or descriptions such as putting their hands around your throat are used.
4. If strangulation is reported or strongly suspected and the victim is displaying symptoms of difficulty breathing, a hoarse voice, or if they are assuming the sniffing position, this constitutes a medical emergency.
5. Fractures may be caused (or enabled) by medical conditions such as Osteoporosis or as a side effect of Paget's disease or some types of cancer.
6. If a client has fallen, and presents with any of these symptoms, they may have broken their hip, and the paramedics should be called immediately: difficulty walking, pain in hips or upper legs or knees , one leg shorter than the other in the presence of pain, or leg deformity.
7. Persons over the age of 65 have two times the national average of burns and we truly do not know how many are accidental and how many are caused by abuse, but some studies show that up to 36 to 70% are suspicious.
8. Stabbing wounds may look very different. One determiner as to how a stab wound will appear has to do with the direction of the victim's Langer's Lines. If they are stabbed parallel to a Langer line, the incised wound will be smaller and will probably heal more efficiently. But, if they are stabbed perpendicularly to the lines, there will be a larger opening.
9. There are several well-known treatments often utilized by various ethnic groups as curatives that may leave marks similar to physical abuse Some of these practices include: cupping, coining, and moxibustion.
10. The misuse of medications may include overmedicating to keep victims drowsy or non-communicative, or under medicating as punishment when the victim is in pain.
11. The consequences from force-feeding may include discomfort, pain and aspiration.
12. The abuse of restraints is more likely to take place at home than it is in a licensed facility.

- Under medicating
- Overmedicating
- Sniffing position
- Raccoon eyes
- Choked
- Coining
- Hips or upper legs or knees
- 36 to 70%
- Aspiration
- Cupping
- Run
- Langer lines
- Licensed facility.
- Cancer
- Smaller
- Moxibustion
- One leg shorter than the other
- Petechiae
- Putting their hands around your throat
- At home
- Osteoporosis
- Larger

Documenting Injuries

While assessing and observing injuries as well as understanding their causes are critical to investigating physical abuse; documenting what you find or hear about is equally important. In order to do a thorough assessment and to provide the required documentation for physical abuse (which may include prosecution of the perpetrator) it is important to document reported or observed injuries, the client's explanation (or lack of explanation) for the injury, how it was discovered as well as the coloration, size texture, and shape of the injury.

Types of Skin Injuries:

- Bruises
- Abrasions
- Avulsions (tearing away of skin)
- Lacerations (an irregular tear-like wound)
- Tears
- Ulcers (breakdown of the skin by various causes)
- Burns

Descriptive Categories for Describing Injuries:

- Location
- Color
- Size
- Shape
- Texture
- Border
- Number of lesions, etc., (when applicable)

Measurement of injuries:

- Important at a point in time
- Length, width, depth
- If a limb, put in a standard position
- Document the measurement instrument you are using (ruler, tape measure, coins)

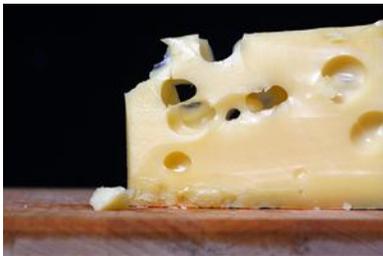
Activity #5: Transfer of Learning Activity (answer sheet)

Description Exercise

Attempt to describe each object by describing its attributes using descriptive words as you would for an injury that you observed. Specific measurements are not provided, or required.



1. Starfish *Possible Answers- Beige-orange with five protrusions branching off of a central body. Protrusions or 'legs' are roughly the same length. The surface is irregular with a pattern of raised yellowish lines or shapes*



2. Swiss Cheese *Possible Answers-Soft but solid yellow substance with numerous holes or openings some of which penetrate all of the way through the item and others only penetrate partially. Flat on three sides with a ragged edge on the top left*



3. Orchid *Possible Answers-A red and yellow colored object with several symmetrical structures including 5 similar petals-all with slightly different patterns of coloration. In addition there is a partially symmetric structure that hangs below the petals, as well as a lipped projection like a tube or small cup just above the center.*

Activity #6: Discussion Activity (answer key)

Case Scenarios

The activity can be done as a group activity or as one to one training tool. The priority in this activity is not to obtain identical answers, but rather to be able to see that participants are thinking about physical abuse and applying some of the information they learned from the Markers of Physical Elder Abuse and Neglect eLearning as well as from this transfer of learning workbook.

Please read the following brief scenarios and consider possible physical abuse. Answer the questions following each scenario.

1. You receive a report of possible psychological/emotional abuse and/or physical abuse of 82y/o Mr. Schneider by his live-in son, Robert. When you knock on the door, Mr. Schneider seems very anxious when you explain that you need to talk to him. He steps outside the door with you and tells you in a whisper, I can't talk now, come back at 4PM, after my son goes to work. You return at 4:30PM and he asks you inside. He tells you that he doesn't like to upset his son. Mr. Schneider's son is 58y/o. When you mention concerns about Mr. Schneider's safety, he becomes more evasive, saying repeatedly that his son is really a good man, but that he just loses his temper sometimes. As you talk with Mr. Schneider, you notice an unusual red mark on his arm that has a loop in it. You also notice that one of his wrists is bruised and see several small finger-sized bruises on his other arm.
 - a) What might the looped red mark on his arm be? *Possible answer-this injury may be a pattern injury, perhaps caused by a cord, a belt, or a clothes hanger.*
 - b) What is the medical term for bruising? *Ecchymosis*
 - c) If the bruising about the wrist is from physical abuse, what kind of activities or actions might have caused it? *Possible answer-bruising about the wrist could indicate that he has been grabbed or had his arms forced, perhaps during a struggle. It could also indicate that he may have been restrained at some point and bruised his wrist struggling against some type of restraint.*
 - d) What might the *finger-sized* bruises indicate? *Possible answer-these may be 'grab' marks where his arm has been grabbed roughly by someone else. This may be a marker of physical abuse*
 - e) What behavioral indicators might also contribute to your suspicions that he may have been physically abused? *Mr. Schneider appeared very anxious when the first visits was made, insisting that the investigator return after his son was gone to work. This would seem to indicate that he is afraid of his son. When the question of his safety came up during the interview, he became evasive and began emphasizing that his son was a 'good man' but just lost his temper. Many parents that are victims of abuse by their children attempt to cover up for their children despite the abuse as they do not want to get their children in trouble, they may feel responsible for their child's behavior even though that child is now an adult, and they may fear retaliation by the abuser if the abuse is found out.*

2. Mrs. Mays is an 85y/o woman who is confined to her bed most of the time. She is diabetic, suffers from dementia, and has severe Osteoporosis. A report of abuse is received from a paid caregiver who was recently fired when she told Mrs. Mays daughter, Gloria, that she was being too rough with Mrs. Mays. When you visit the home, Mrs. May's daughter, Gloria answers the door. Gloria is pleasant and invites you in. Gloria tells you that her mother is asleep now, but will be awakened soon for her lunch. Gloria then says "I bet this is about some complaint from the caregiver I fired." You tell Gloria that you cannot disclose information that brought you to see Mrs. Mays, and you then engage Gloria in talking about Mrs. Mays. Gloria tells you how much she loves her mother, but also describes at length how frustrating it is to care for her. Gloria tells you "I have no life" and describes how confused her mother is, always wandering around the house, being incontinent, and falling. Mrs. Mays Osteoporosis makes her especially vulnerable to fractures if she falls; however, she is too confused to remember her daughter's entreaties that she not walk alone. Gloria tells you that it is difficult to get Mrs. Mays to eat, and that she has to *push her to eat*. At this point you hear Mrs. May calling out to Gloria. You accompany Gloria into Mrs. May's room and find Mrs. Mays to be frail, very thin, and from her facial expression, apparently confused. Gloria introduces you to her mother, and then tells her mother that she will bring in lunch. She tells Mrs. Mays-"remember you have to eat, if you don't, you know what will happen". As Gloria goes to get the food, you notice that there are soft ties, similar to terry cloth robe belts tied around the head board on each side, and that Mrs. Mays wrists are red. You also notice that Mrs. Mays has some bruising around her lips, and has a very congested cough.
- a) **Did Gloria's frustration raise a possible red flag?** *Possible answer-Gloria's frustration and feelings of being overwhelmed increase the chances that she may take out her frustrations in a physical manner.*
 - b) **Gloria made the statement to her mother: "remember you have to eat, if you don't, you know what will happen." Why is this concerning?** *Possible answer-Gloria's statement sounds like a threat. Will Mrs. May be punished if she doesn't eat? And if so, how will she be punished? Could she be being abused if she does not eat.*
 - c) **What might the belts tied around the head board on each side indicate?** *Possible answer- The belts on the bed may be being used as restraints, and whether this is happening should be clarified. If so, the restraints may be a source of abuse. How might this relate to the redness you observed on her wrists? Possible answer-the redness around her wrists may be a further indication that she has been restrained, and that she may have been injured because the restraints were tight or because she pulled against them.*
 - d) **What concerns might the bruising around her lips raise?** *Any unexplained bruising should be explored. Bruising around her lips could be a sign that she is being force fed, or perhaps struck.*
 - e) **Mrs. May has a very congested cough, what concerns might this raise?** *Possible answer-any noticeable medical symptom should be assessed as it pertains to her care. In Mrs. May's case, especially after Gloria's apparent threat about her not eating, it should be determined if she is being fed properly or if she is being force*

fed. Force feeding could lead to aspiration and possible serious medical consequences.

3. You go to Mrs. Smith's home to investigate a report made by a neighbor that said that they have heard Mr. Smith shouting loudly at his wife and the sound of objects being thrown inside the home. Mr. Smith is allegedly an alcoholic with a bad temper. When you interview Mrs. Smith, Mr. Smith is asleep. Numerous liquor bottles can be seen around the home. You notice that Mrs. Smith keeps extending her neck forward while you talk, and rubbing her throat. When you ask her about this, she says that she has had a sore throat. You also note that she has a fading discoloration around both of her eyes, and a bruise behind her ear. She tells you that she is clumsy, and that she ran into a door frame while she was bringing in groceries. She complains that she has had a severe headache for several days.
 - a) **What significance does Mrs. Smith rubbing her throat and extending her neck have to your investigation?** *If Mrs. Smith is displaying the 'sniffing position' and continually massaging her throat, she may be a victim of strangulation. This position may indicate a medical emergency.*
 - b) **What red flags may be raised by apparent discoloration or bruising around both of her eyes?** *Possible answer-she may have been struck, may have fallen, or may have been pushed down and struck her head. Bilateral bruising of the eyes (also called raccoon eyes) may indicate serious injuries that will constitute a medical emergency.*
 - c) **What significance might the bruising behind her ear have?** *The bruising behind her ear may be "Battle Sign", and an indicator of a temporal bone fracture. These injuries, especially seen together would likely constitute a medical emergency.*
 - d) **Does the coloration of Mrs. Smith's apparent injuries provide proof of how long ago she was injured?** *Based on the UCI bruising study, the coloration of bruises varies over time from person to person, so bruise color is not a dependable measure of when the injury occurred.*

Conclusion

In addition to heavy caseloads and mountains of paperwork, APS workers also bear the weighty responsibility of having to be continually vigilant for many different types of abuse. For the new worker, this can seem daunting, however, with experience, with the right learning tools, and with supervision; assessment for various types of abuse will come more naturally. Physical abuse can be particularly serious due the injuries it can inflict. Consideration of the client's safety, as well as the safety of the investigator are both extremely important. Although the difficulty of the APS investigator's role is not always appreciated; it is a vital role, and one that has saved many victims' lives. Thank you for the important and sometimes difficult work that you all do.

Activity Worksheets

Activity #1: Identifying Physical Abuse

Answer the following questions related to physical abuse. This activity may be done as a group discussion, or done individually and discussed with a supervisor or other mentor.

1. Identify some examples of normal age related changes? How are the changes you observed different from similar physical abuse related signs or symptoms?

2. If you are an experienced Adult Protective Services worker, identify three abuse related injuries you have encountered, and describe briefly how you were able to identify them as physical abuse.

3. How might you approach a new client that you are interviewing when you observe the following:
 - a. A 'black eye'

 - b. A hand shaped bruise on the arm

 - c. Bruising to the inner thigh

4. How might a client display anxiety or fearfulness during an interview?

5. Provide one brief example of each of the following types of abuse:
 - a. Hitting, pushing, or slapping

 - b. Strangulation

 - c. Force feeding

 - d. Misuse of medications

 - e. Abuse of restraints

Activity #2: Memory Quiz Activity

Answer the following questions based on the information presented in the eLearning and on the preceding pages.

1. Bruising is caused by blunt force; either a body part hits something harder than itself, or_____.
 - a. A hot object burning the skin
 - b. A grooved object scraping the skin
 - c. A hard object hits the body part
 - d. A mole may turn into a bruise
2. The deeper or harder the trauma that causes the bruising is,_____.
 - a. the deeper the bruise will be
 - b. the harder the bruise will be to see
 - c. the more likely it is that the injured person will not remember it
 - d. the less likely that it is caused by abuse
3. In older adults, the color of bruises _____.
 - a. will always appear immediately after the injury
 - b. will always follow the same pattern of color change over the same time period
 - c. will differ depending on whether the injury is abuse or not
 - d. will vary widely over time
4. Bruises were more likely to indicate abuse when found in the following areas:
 - a. on the back, knees, trunk, and hands
 - b. on the scalp, back, ankles, and shoulders
 - c. on the head & neck, chest, abdomen, buttocks, palms and soles, and ears
 - d. on the face, arms, ankles, hands, and feet

True or False

5. The Skin is the only body part that can be bruised. True or False
6. Bruising will only occur at the immediate point of impact. True or False
7. If someone is hit very hard, and the resultant bruising affects deep tissue, it may take some time (perhaps days) before a visible bruise appears on the skin. True or False
8. In the UCI bruising study, Inflicted bruises tend to be larger than accidental bruises. True or False
9. In the UCI bruising study, the majority of physically abused adults did not have bruising. True or False
10. In the UCI bruising study, more abused older adults remembered the cause of their injuries than non-abused older adults did. True or False
11. Abusive bruising was often found in more than one plane of the body (for example- on the front and side of the neck, or on the inner and outer aspect of arm. True or False

Activity #3: Matching

Match the term at left with the best choice from the words or phrases on the right.

_____ Pattern Injury

_____ Deep injury

_____ Coup Injury

A. Bleeding in the brain

B. 'Cheekbone'

C. Bone pushed into the skull by a blow

Markers of Physical Abuse

_____ Contra Coup Injury	D. Bruising
_____ Subdural Hematoma	E. Discoloration, usually 3-10mm in diameter
_____ Zygomatic Process	F. May take 1-3 days for bruising to appear
_____ Depressed Skull Fracture	G. Fluid from the ears or nose
_____ Skull fracture symptom	H. Discoloration, less than 3mm in diameter
_____ Ecchymosis	I. Located behind/below the ear
_____ Pupura	J. Discoloration behind/below the ear
_____ Petechiae	K. Injury that shows the object shape that caused it
_____ Mastoid	L. Edeema in the brain when brain rebounds against the skull
_____ Battle Sign	M. Edeema in the brain bouncing off of the skull on the traumatized side

Activity #4: Transfer of Learning Activity

Fill in the blank

1. The blackening or bruising of both eyes in facial trauma or head injuries is sometimes call _____ .
2. The accumulation of bleeding under the skin will discolor the area around the eye, and may _____ down the face as the blood seeps to tissues below the actual injury site.
3. When interviewing clients where strangulation is suspected, clients are more likely to respond to questioning when terms such as _____ or descriptions such as _____ .
4. If strangulation is reported or strongly suspected and the victim is displaying symptoms of difficulty breathing, a hoarse voice, or if they are assuming the _____ , this constitutes a medical emergency and paramedics should be called immediately.

Markers of Physical Abuse

5. Fractures may be caused (or enabled) by medical conditions such as _____ or as a side effect of some types of cancer or _____.
6. If a client has fallen, and presents with any of these symptoms, they may have broken their hip, and the paramedics should be called immediately: difficulty walking, pain in _____, _____ in the presence of pain, or leg deformity.
7. Persons over the age of 65 have two times the national average of burns and we truly do not know how many are accidental and how many are caused by abuse, but some studies show that up to _____ are suspicious.
8. Stabbing wounds may look very different. One determiner as to how a stab wound will appear has to do with the direction of the victim's Langer's Lines. If they are stabbed parallel to a Langer line, the incised wound will be _____ and will probably heal more efficiently. But, if they are stabbed perpendicularly to the lines, there will be a _____ opening.
9. There are several well-known treatments often utilized by various ethnic groups as curatives that may leave marks similar to physical abuse, however, usually do not indicate abuse. Some of these practices include: _____, _____, and _____.
10. The misuse of medications may include _____ to keep victims drowsy or non-communicative or _____ as punishment when the victim is in pain.
11. The consequences from force-feeding may include discomfort, pain and _____.
12. The abuse of restraints is more likely to take place _____ than it is in a _____.

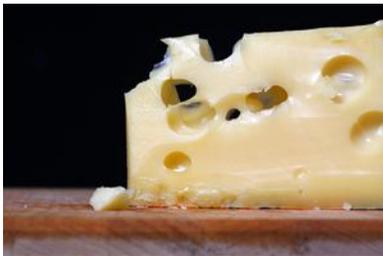
Activity #5: Transfer of Learning Activity

Description Exercise

Attempt to describe each object by describing its attributes using descriptive words as you would for an injury that you observed. Specific measurements are not provided, or required.



1. Starfish



2. Swiss Cheese



3. Orchid

Activity #6: Discussion Activity

Case Scenarios

The activity can be done as a group activity or as one to one training tool. The priority in this activity is not to obtain identical answers, but rather to be able to see that participants are thinking about physical abuse and applying some of the information they learned from the Markers of Physical Elder Abuse and Neglect eLearning as well as from this transfer of learning workbook.

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- a) What might the looped red mark on his arm be?

- b) What is the medical term for bruising?

- c) If the bruising about the wrist is from physical abuse, what kind of activities or actions might have caused it?

- d) What might the finger-sized bruises indicate?

- e) What behavioral indicators might also contribute to your suspicions that he may have been physically abused?

2. Mrs. Mays is an 85y/o woman who is confined to her bed most of the time. She is diabetic, suffers from dementia, and has severe Osteoporosis. A report of abuse is received from a paid caregiver who was recently fired when she told Mrs. Mays daughter, Gloria, that she was being too rough with Mrs. Mays. When you visit the home, Mrs. May's daughter, Gloria answers the door. Gloria is pleasant and invites you in. Gloria tells you that her mother is asleep now, but will be awakened soon for her lunch. Gloria then says "I bet this is about some complaint from the caregiver I fired." You tell Gloria that you cannot disclose information that brought you to see Mrs. Mays, and you then engage Gloria in talking about Mrs. Mays. Gloria tells you how much she loves her mother, but also describes at length how frustrating it is to care for her. Gloria tells you that "I have no life" and describes how confused her mother is, always wandering around the house, being incontinent, and falling. Mrs. Mays Osteoporosis makes her especially vulnerable to fractures if she falls; however, she is too confused to remember her daughter's entreaties that she not walk alone. Gloria tells you that it is difficult to get Mrs. Mays to eat, and that she has to push her to eat. At this point you hear Mrs. May calling out to Gloria. You accompany Gloria into Mrs. May's room and find Mrs. Mays to be frail, very thin, and from her facial expression, apparently confused. Gloria introduces you to her mother, and then tells her mother that she will bring in lunch. She tells Mrs. Mays-"remember you have to eat, if you don't, you know what will happen". As Gloria goes to get the food, you notice that there are soft ties, similar to terry cloth robe belts tied around the head board on each side, and that Mrs. Mays wrists are red. You also notice that Mrs. Mays has some bruising around her lips, and has a very congested cough.

- a) Did Gloria's frustration raise a possible red flag?
- b) Gloria made the statement too her mother: "remember you have to eat, if you don't, you know what will happen. Why is this concerning?
- c) What might the belts tied around the head board on each side indicate?
- d) What concerns might the bruising around her lips raise?

e) Mrs. May has a very congested cough, what concerns might this raise?

3. You go to Mrs. Smith's home to investigate a report made by a neighbor that said that they have heard Mr. Smith shouting loudly at his wife and the sound of objects being thrown inside the home. Mr. Smith is allegedly an alcoholic with a bad temper. When you interview Mrs. Smith, Mr. Smith is asleep. Numerous liquor bottles can be seen around the home. You notice that Mrs. Smith keeps extending her neck forward while you talk, and rubbing her throat. When you ask her about this, she says that she has had a sore throat. You also note that she has a fading discoloration around both of her eyes, and a bruise behind her ear. She tells you that she is clumsy, and that she ran into a door frame while she was bringing in groceries. She complains that she has had a severe headache for several days.

- a) What significance does Mrs. Smith rubbing her throat and extending her neck have to your investigation?
- b) What red flags may be raised by apparent discoloration or bruising around both of her eyes?
- c) What significance might the bruising behind her ear have?
- d) Does the coloration of Mrs. Smith's apparent injuries provide proof of how long ago she was injured?