

A Case of Unilateral Maxillary Fracture Caused by Domestic Elder Abuse: The Role of Dentist

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Abstract: Elder abuse is commonly defined as a single or repeated act or lack of appropriate action occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person. A lady 81 years old presented to the hospital with dento-alveolar fracture of the left maxilla. The associated bruising of the left facial region was of great importance. The home care provider gave confused details about the fall injury. The patient had affected communication skills due to dementia disease. The suspicion of fall associated to abuse generated from the different views between the two persons. The mental status of the patient occasionally may seriously complicate obtaining an accurate history of the trauma. Therefore, the identification of such a pathological condition is complicated having as a consequence many cases to remain with incorrect diagnosis. The proper management of a patient of this type of injury will be discussed. Abusive behaviour by family carers towards people with dementia is common with a third reporting important levels of abuse and half some abusive behaviour. The role of dentist by contacting the responsible authorities such as forensic (medical, dental and psychiatric or psychological), social and other implicated local societies by law should be emphasized. The dentists should be aware of this abnormal behaviour in order to prevent and assess properly any suspected abuse in elder women or men.

Key words: Elder abuse, neglect, categories, fraud, exploitation, caregivers

INTRODUCTION

The structure of the society has been transformed by the demographic, financial and health alterations that took place within the last years. As a result of the higher age limit and the decreased rates of fatality that medicine and the anthropocentric character of western societies have achieved, we observe a substantial anode of the elder population. Although, it seems an optimistic phenomenon, nevertheless it has some severely unpleasant parameters. These consequences refer to the quality of life and the amount of love and attention these old people receive when they depend on others (Cooper *et al.*, 2009; Roche, 2004; Stavrianos *et al.*, 2007; Allison *et al.*, 1998). Beyond the concomitants of old age, related to the person's health and are expected to appear,

the situation is exacerbated by violent episodes, neglect and maltreatment that all together compose the wound of elder abuse. As elders become more physically frail they are less able to stand up and defend themselves against potential abusers. They are unable to see, hear or think as clearly as they used to, leaving space for unscrupulous people to take advantage of them. Many times elder people are being abused in substantial ways by people who are responsible for their care and their well-being. That's why, unfortunately a large number of these cases go unreported (Roche, 2004; Kleinschmidt, 1997).

Elder abuse usually takes place where the senior lives. Sometimes, institutional settings can also be sources of elder abuse. It is believed that the problem of elder abuse emerges from the inability of the younger members in a family to coexist with those that are less

active and disabled due to their advanced age. Medical institutions and public services have the responsibility to investigate any suspicious cases that they are dealing with so they can determine the true causes of injuries, signs of neglect and peculiar/disoriented behaviour from the old patient (Allison *et al.*, 1998).

Some factors that promote this phenomenon are the dependence of the elderly entirely on the family, alzheimer's disease, financial awkwardness of the family that supports the elder person and stress that is very common (Cooper *et al.*, 2009; Glassman *et al.*, 1994).

Despite the fact that the society has progressed and the improved strata offers a comfortable way of living, still the elder abuse is not yet known to many as a term and as a reality and only few actions are taken for its extinguishment.

The most sensitive groups are those over the age of 75 as statistics show but these facts do not exclude every elder person from becoming a victim, regardless to his/hers financial and social status, health condition and sex (Herschaft *et al.*, 2006; Sobsey and Mansell, 1994). Those who leave by themselves either because they're widowed or single, experience social exclusion are suppressed, manipulated and sentimentally affected by their carers.

The perpetrators are usually members of the family (adult children, son/daughter in law), spouses that have been mistreated throughout the years of marriage and seek for revenge and hired carers. They can also be high positioned officers that can influence and exploit an old person. Numerous cases of abuse have been recorded and it is obvious that elder abuse has many aspects and can be expressed in various ways (Allison *et al.*, 1998; Herschaft *et al.*, 2006).

CASE REPORT

A lady 81 years old presented to the hospital with dento-alveolar fracture of the left maxilla (Fig. 1-3). The associated bruising of the left facial region was of great importance. The home care provider gave confused details about the fall injury. The patient had affected communication skills due to dementia disease. The suspicion of fall associated to abuse generated from the different views between the two persons. The mental status of the patient occasionally may seriously complicate obtaining an accurate history of the trauma. The patient treated surgically using wire-splint technique for 2 months. The post treatment result as shown in Fig. 3 is optimal.



Fig. 1: Maxillary dentoalveolar fracture with characteristic malposition of several teeth



Fig. 2: Bruises of the cheek are indicative of rapid blunt injury



Fig. 3: Treated dentoalveolar fracture showed good dental alignment

CATEGORIES OF ELDER ABUSE

Physical abuse: It presents similarities to child abuse. Traumas are usually tracked on the head and the neck and

all inexplicable injuries are justified as accidents by the victim's environment. Signs and symptoms of physical elder abuse are:

- Unexplained signs of injury such as bruises, welts or scars especially if they appear symmetrically on two sides of the body
- Broken bones, sprains or dislocations
- Report of drug overdose or apparent failure to take medication regularly (a prescription has more remaining than it should)
- Broken eyeglasses or frames
- Signs of being restrained such as rope marks on wrists Caregiver's refusal to allow you to see the elder alone (Herren and Byron, 2005; Cooper *et al.*, 2008)

Sexual abuse: As unbelievable and monstrous as it sounds, yet is quite common. Sexual abuse is contact without the elder's consent. Such contact can involve physical sex acts but also activities such as showing an elderly person pornographic material, forcing the person to get undressed or to watch sex acts unwillingly. Although, all these might seem hypes, unfortunately they do occur in modern societies as sad as it might be (Sobsey and Mansell, 1994; Herren and Byron, 2005; Sobsey and Doe, 1991).

Inactive abuse: It is the absence of proper care but it is considered not to be intentional. The inability of the care giver to provide sufficient care to the elderly arouses when the person suffers it self by illness or is not trained sufficiently and even when the care giver does not realise the importance of the tasks he/she undertook.

Active abuse: It is the intentional deprivation of services to the elder person by the care giver, causing them discomfort and exalts any health and psychological issues. This is done by constrictions and lack of food, medicines, hearing aids, dentures and other helpful equipment necessary for the person's well being. This type of behaviour leads to deliberate abandonment.

Self-neglect: It happens when the person it self does not look for his/hers vital needs, like food, medication, personal hygiene, clothing and medical treatment. This may occur either because the senior is disabled or because he refuses to provide for him/her self.

Financial exploitation: Usually involves unauthorized use of an elderly person's funds or property. It can be caused either by a caregiver or by an outside scam artist. Unfortunately many times a caregiver might misuse an elderly person's personal checks, credit cards or accounts, steal cash or even household goods from

him/her, forge the elder's signature or engage in identity theft. The outsiders usually try to fool the elder by creating phony charities or by using investment fraud. Sometimes they even announce a non-existing prize that can be won by the elder only if he/she gives a certain amount of money in cash (Cooper *et al.*, 2009; Herren and Byron, 2005; Young *et al.*, 1997).

Healthcare fraud and abuse: As sad as it might sound, it is carried out by unethical doctors or hospital personnel or even other professional care providers. It includes:

- Not providing healthcare but charging for it
- Overcharging medical services
- Recommending fraudulent remedies for illnesses
- Medicaid fraud (Kleinschmidt, 1997)

Psychological abuse: It is occurred when the elderly is deprived of socialization is handled like a burden and feels useless and unworthy because of the way his environment treats him. This leads to depression and lack of self confidence making the person feel lonely and in constant anxiety and distress. The elderly can be humiliated and intimidated by their care givers or even suffer from extortion, threats and abandonment, absence of tenderness and loving emotions that are necessary to any human being. These reflect on the behaviour of the pensioner as the person feels awkward around people, appears incompetent of expressing opinion, fear and agony is obvious in his/her look and does not show any interest in life and what happens around. Emotional abuse is about emotional pain or distress caused by reckless behaviour of the people who surround seniors. There are two forms of emotional abuse (Herren and Byron, 2005):

Verbal forms:

- Intimidation through yelling or threats
- Humiliation and ridicule
- Habitual blaming

Nonverbal psychological forms:

- Ignoring the elderly person
- Isolating him/her of friends and activities
- Terrorizing or menacing him/her

GENERAL SIGNS AND SYMPTOMS OF ELDER ABUSE

Unfortunately, signs and symptoms of elder abuse are hard to notice especially at first because most of the times they can be mistaken as results of dementia or frailty. Especially when caregivers deny elder's problems (Cooper *et al.*, 2008, 2009).

- Frequent arguments or tension between the caregiver and the elder person
- Changes in the personality of the elder person
- Changes in his/her general behaviour especially when these changes occur rapidly

Signs and symptoms: When it comes to emotional abuse, witness of threatening caregiver or weird behaviour on behalf of the elder person, meaning signs of rocking and mumbling to itself. When it comes to physical abuse, one may notice broken bones or dislocations, broken eyeglasses or frames, unexplained signs of injury such as bruises, welts or scars which in these cases usually appear symmetrically on the body. Also, one may experience caregiver's denial to allow him/her to see the elder person alone. When it comes to sexual abuse there are bruises around breasts or genitals, torn, stained or blooded underclothing, unexplained vaginal or anal bleeding and unexplained venereal disease or genital infections (Sobsey and Mansell, 1994; Sobsey and Doe, 1991).

When it comes to financial exploitation, there can be sudden changes of the elder's financial condition, items or cash missing from his/her household, unpaid bills, unnecessary services, goods or subscriptions or in general financial activities that the elder couldn't possibly have done by him/her self. Finally, when it comes to healthcare frauds, one may find evidence of overmedication or under medication or inadequate care when bills are paid in full. Diagnostic tools for the medical/dental team examining the victim are firstly an accurate interview of the victim concerning his/her health, conditions, previous injuries and generally a social/academic and financial status as well as his/her environment situation. All these reveal significant aspects. Then a full examination is done to record all indications, symptoms and injuries and if decided necessary further investigation is held. Also x-rays can be used for diagnosis as well as cat scans, photographs, radiograph exams and anything that might shed some light on the case. Every patient that is under investigation for possible abuse has to be treated by a certain protocol and the doctor is obliged to collect all evidence and inform the authorities (Herschafft *et al.*, 2006).

The medical examiner has to be experienced enough in cases of elder abuse so he/she can determine the true cause of his findings on the patient. He has to be in place to recognize old bruises from new from their appearance and that is a clue of previous assaults and continuous abuse of this person by a third party. If the deformities and the injuries are on both sides of the face, there is a bruised eye and ecchymosis in the area then all these

make us presume of their intentional causing. Also fraction of the maxillofacial bones is noticed in cases of elder abuse as well as fractions of the nasal area and the zygomatic arc. What is not usually found in elder abuse are biting marks that are more common in sexual abuse. Some times the clinical examiner needs to give a differential diagnose for symptoms or indications that either come from abuse or pathological conditions that appear along with old age (Herschafft *et al.*, 2006).

Some conditions with indications that might seem tricky for the doctor to determine their causes are vascular denaturation and deformation, clots and varicose veins that give ecchymosis and discolouration of the skin, lupus, bad form of erythema, diabetes, peripheral vascular ulcers, ulcers due to immobility etc. (Lachs and Fulmer, 1993; Roche, 2004; Herschafft *et al.*, 2006). Furthermore, an additional factor of difficulty in detecting cases of elder abuse is the lack of collaboration with the victim. The reasons can be the denial of the elder victim to realise the situation, the fear of abandonment, isolation, revenge by the carer or the prospect of being held in an institution. Additionally, they can be under the absolute control of their torturer and completely depend on him/her to receive food, clothing, medication and housing. Some of the elderly people are really proud and dignified people and feel ashamed to declare what they are suffering and others are unaware of the organisations created to protect and help them. Finally, most of them ignore their civil rights and find it hard to comprehend the functions of the legal system and there is also a general disbelief for the integrity of law enforcement officers and lack of trust towards them due to past unpleasant experiences (Lachs and Fulmer, 1993; Allison *et al.*, 1998; Roche, 2004; Herschafft *et al.*, 2006).

DISCUSSION

Dental providers are in an excellent position to identify elder abuse and neglect, yet they are often reluctant to report or intervene in cases of suspected elder maltreatment. This problem is widespread and the negative impact of this dilemma cannot be ignored. In 1999, the American Dental Association's House of Delegates, through Resolution 44H-1999, urged constituent dental societies to educate their members about abuse and neglect and individual states legal reporting requirements (Johnson *et al.*, 2001).

As elders become more physically frail, they're less able to stand up to bullying and or fight back if attacked. They may not see or hear as well or think as clearly as they used to, leaving openings for unscrupulous people to take advantage of them. Mental or physical ailments

may make them more trying companions for the people who live with them. Elder abuse tends to take place where the senior lives: most often in the home where abusers are apt to be adult children; other family members such as grandchildren or spouses/partners of elders. Institutional settings especially long-term care facilities can also be sources of elder abuse (Cooper *et al.*, 2008). Physical elder abuse is non-accidental use of force against an elderly person that results in physical pain, injury or impairment. Such abuse includes not only physical assaults such as hitting or shoving but the inappropriate use of drugs, restraints or confinement.

Many nonprofessional caregivers-spouses, adult children, other relatives and friends-find taking care of an elder to be satisfying and enriching. But the responsibilities and demands of elder caregiving which escalate as the elder's condition deteriorates can also be extremely stressful. The stress of elder care can lead to mental and physical health problems that make caregivers burned out, impatient and unable to keep from lashing out against elders in their care (Lachs and Fulmer, 1993; Kleinschmidt, 1997; Allison *et al.*, 1998; Johnson *et al.*, 2001).

CONCLUSION

Elder care giving can be extremely stressful for some people. Thus it brings problems not only to the elder person but also to the care giver, who usually suffers from depression. This along with other parameters can lead to elder abuse.

The medical examiner should be aware of the foundations and organisations that interfere in such cases and he must approach and rely on. He must also know all the laws concerning matters of abuse and let his patient know of his rights and consult him what his next moves should be and what proceedings should be followed.

REFERENCES

Allison, E.J., P.C. Ellis and S.E. Wilson, 1998. Elder abuse and neglect: The emergency medicine perspective. *Eur. J. Emerg. Med.*, 5: 355-363.

Cooper, C., A. Selwood and G. Livingston, 2008. The prevalence of elder abuse and neglect: A systematic review. *Age Ageing*, 37: 151-160.

Cooper, C., A. Selwood, M. Blanchard, Z. Walker, R. Blizard and G. Livingston, 2009. Abuse of people with dementia by family carers: Representative cross sectional survey. *BMJ.*, 338: b155-b155.

Glassman, P., C. Miller, T. Wozniak and C. Jones, 1994. A preventive dentistry training program for caretakers of persons with disabilities residing in community residential facilities. *Special Care Dentistry*, 14: 137-143.

Herren, M. and R. Byron, 2005. Elder abuse update. *General Dentistry*, 6: 217-219.

Herschaft, Å., M. Alder, D. Ord, R. Rawson and E. Smith, 2006. *Manual of Forensic Odontology*. ASFO, Impress Printing and Graphics Inc., New York, pp: 210-240.

Johnson, T.E., A.D. Boccia and M.S. Strayer, 2001. Elder abuse and neglect: Detection, reporting and intervention. *Special Care Dentistry*, 21: 141-146.

Kleinschmidt, K.C., 1997. Elder abuse: A review. *Ann. Emerg. Med.*, 30: 463-472.

Lachs, M.S. and T. Fulmer, 1993. Recognizing elder abuse and neglect. *Clin. Geriatr. Med.*, 9: 665-681.

Roche, J., 2004. Violence towards elderly persons. *Rev. Prat*, 54: 742-749.

Sobsey, D. and S. Mansell, 1994. An international perspective on patterns of sexual assault and abuse of people with disabilities. *Int. J. Adolescent Med. Health*, 7: 153-178.

Sobsey, D. and T. Doe, 1991. Patterns of sexual abuse and assault. *Sexuality Disability*, 9: 243-259.

Stavrianos, C., L. Zouloumis, O. Karaiskou and I. Stavrianou, 2007. Family violence and child abuse. *Balkan J. Stomatol.*, 11: 13-20.

Young, M.E., M.A. Nosek, C. Howland, G. Chanpong and D.H. Rintala, 1997. Prevalence of abuse of women with physical disabilities. *Arch. Phys. Med. Rehabil.*, 78: S34-S38.