

Case Report: Coxa-osteoarthritis and a deficient health care attention with traumatic iatrogenesis due to non-specialized medical incompetence

Reporte de Caso: Coxa-artrosis y calidad de la atención médica deficiente con iatrogenia traumática por incapacidad médica no especializada

Ruvalcaba Ledezma Jesús Carlos ^{1*}, Vargas Sánchez Gloria ², Josefina Reynoso Vázquez ³,
López Pontigo Lydia ⁴

Abstract:

Objective. To describe the beginnings and evolution of this condition, as well as to generate a proposal in the medical practice for the trauma service in order to avoid complications due to inadequate patient care derived from the intervention of resident doctors; not yet defined as traumatologists as the main axis of disability and complications generated in the patient with coxa-osteoarthritis. **Material and methods.** A case of coxa-osteoarthritis with disabling complications derived from non-specialized care with traumatic and disabling consequences for the patient was analyzed based on laboratory tests and what the patient refers. **Results.** The patient is on sick leave and her life quality has been affected because of a femoral fracture caused by a physician who was not specialized in traumatology. This showed quality deficiency in medical care, diagnostic errors, poor professional capacity of the health care staff, delay in scheduled X-Ray studies, poor imaging technique hampering a timely diagnosis, and the health care staff being indifferent to the pain of others. **Conclusion.** The patient is on permanent disability from work, with a left femur prosthesis derived from the fracture caused by a medical resident who was not specialized in trauma.

Keywords:

Coxa-osteoarthritis, permanent work disability, poor quality of health care services, medical disability, medical iatrogenesis

Resumen:

Objetivo. Describir los inicios y evolución de este padecimiento, así como generar una propuesta en el ejercicio médico para el servicio de traumatología con la finalidad de evitar complicaciones por atención inadecuada del paciente derivado de la intervención de médicos residentes; no definidos aún como traumatólogos como eje principal de la incapacidad y complicaciones generadas en el paciente con coxa-artrosis. **Material y métodos.** Se realizó análisis de la información generada por un caso de coxa-artrosis con complicaciones incapacitantes derivadas de atención no especializada con consecuencias traumáticas e incapacitantes en el paciente, a partir de pruebas de gabinete de la paciente y de cómo lo refiere la misma. **Resultados.** La paciente ha quedado incapacitada laboralmente y se ha afectado en su estilo y calidad de vida, derivado de la generación de una fractura en fémur ocasionada por un médico no especialista en traumatología, esto denota deficiencia en calidad en la atención médica, errores de diagnóstico, deficiente capacidad profesional del personal de salud que le atendió, tardanza en ejecución calendarizada de radiografías, mala técnica en la toma de radiografías, entorpeciendo el diagnóstico oportuno y mostrando indiferencia al dolor ajeno por parte del personal de salud. **Conclusión.** La paciente cursa con incapacidad laboral permanente, con prótesis en fémur izquierdo derivado de la fractura ocasionada por residente médico no especializado en traumatología.

Palabras Clave:

Coxa-artrosis, incapacidad laboral permanente, deficiente calidad de servicios de salud, incapacidad médica, iatrogenia médica

^{1*} Área académica de Medicina y Coordinación de la Maestría en Salud Pública en (ICSa-UAEH), Instituto de Ciencias de la Salud-Universidad Autónoma del Estado de Hidalgo, México.

² Médico en Centro de Excelencia Medica en Altura by FIFA, Club de futbol Pachuca. Maestra en Salud Pública por [ICSa-UAEH] Instituto de Ciencias de la Salud-Universidad Autónoma del Estado de Hidalgo, México.

³ Área académica de Farmacia y maestría en Salud pública [ICSa-UAEH] Instituto de Ciencias de la Salud-Universidad Autónoma del Estado de Hidalgo, México.

⁴ Departamento de Posgrado [ICSa-UAEH] Instituto de Ciencias de la Salud-Universidad Autónoma del Estado de Hidalgo, México.

“Our world is about to suffer a catastrophe if a well-thought action is not taken soon” A. Einstein.

Bioethics and a professional conduct

The osteoarthritis [OA] is the most common joint disease. It is the most frequent cause of osteomuscular disability in developing, and one of the most frequent reasons of limited disability caused by the daily life of adults in general. Although [OA] may affect any joint of the body, the most frequently affected is the knee followed by the hip. The effects of arthritis in the lower extremities include a reduced mobility and the corresponding loss of independence, as well as an increase of health care needs. OA of the hip has been identified as one of the most important causes of pain that weaken people. The two main categories of hip OA are primary OA (also called idiopathic) and secondary hip OA (result from a defined disorder) [1,2]. Although the ratio of each category is still controversial, the primary hip OA is believed to be the most common one. OA is generally considered as a multifactorial disease involving the interaction of systemic risk factors (for example age, sex, level of hormones, genetics, and nutrition), intrinsic risk factors (for example anatomical variants, muscular weakness, lack of alignment, and joint laxity), and extrinsic risk factors (for example repetitive physical activities and obesity). The risk factors for the progression of hip arthritis are similar to those associated to prevalence and include systemic factors (metabolic, hormonal, genetic, age, sex), biomechanical factors (mechanic workload), body mass index, acetabular dysplasia, and gravity stress radiographs [1,2].

The coxarthrosis or hip arthritis is a degenerative disorder of the joint cartilage and its underlying bone that may affect one or both hip joints. It is a common joint disease among the elderly. It is recognized as one of the main causes of pain, disability and social expenditure, and it represents an important problem for public health care around the world [1,3].

The diagnosis of hip arthritis is based on clinical criteria consisting on hip pain, degeneration of joints confirmed by X-Ray studies. Only hip pain is not a sufficient factor to indicate OA as the majority of people who complain about it do not show clinical nor X-Ray evidence; and not everyone with evidence that confirm the disorder have hip pain. Several systems that study the prevalence of morphological changes of joints have been used through time, and they are roughly comparable. However, there is no gold standard method to mark the X-Ray evidence of hip OA. The first standardized system was suggested by Kellgren and Lawrence (K & L -score) in 1957. Later, their criteria were accepted as a diagnosis method by the World Health Organization. Revisions to this work have tried to tackle some issues about the validity of the original grading system, mainly related to the relative importance of osteophytes to define OA. Some people think that osteophytes are a natural phenomenon of the bone

related to age and remodeling of joints, therefore they should not contribute to the diagnosis of the pathology. Others suggest that the presence of osteophytes is the most specific criteria that leads to the diagnosis of [OA], and are as sensitive as the criteria of narrowing of joints space, above all for hip OA. At least, other 10 X-Ray grading systems for hip OA have been developed since the early '80s. These systems cover almost the same X-Ray characteristics, but some are relatively more important than others. Because the majority of people with X-Ray evidence of hip OA are symptom free, definitions of alternative cases have been suggested [2,3,4,5].

Primitive coxarthrosis is produced in a normal hip, in a person of more than 60 years old and it represents 40% of all coxarthrosis cases.

Secondary coxarthrosis is produced in a hip with dysplasia (with an anatomic malformation), in a younger person and it represents 60% all coxarthrosis cases.

Morphological anomalies are, therefore, the main risk factor of coxarthrosis.

However, we must not forget the excess of weight (overweight and obesity), trauma injuries and micro trauma injuries of contact sports. The professional behavior is included in the concept of bioethics and it is the responsibility and commitment of the health care professional to search for the well-being, therefore, for the recovery of the patient's health [3,4,5].

Presentation of the clinical case

Female patient of 48 years old, single, being revised for having pain in the left pelvic member, discomfort in the left extremity at the level of coxofemoral joint. The patient refers that she has not been under medical evaluation before because of her job. She started having discomfort in that area since April 16, 2013. Because of her work, she came to medical evaluation until May 2 on that same year. She says that she related this pain to sciatic nerve. She was on a job trip and when she was coming back to Irapurato, while arriving to Guadalajara on May 2, 2013 she went the Hospital of Zapopan, Jalisco, Mexico where she got medical care from an specialist in traumatology who analyzed her story and started to evaluate her. The doctor indicated X-Ray studies. After revising such studies, the diagnosis was left coxarthrosis, and the patient was also informed that she was not a candidate for surgery.

She mentions that while she was under observation, receiving an endovenous treatment, the traumatologist leaves and a resident stays with her. This resident asks her questions about her condition and without having enough information about it he starts doing stretching movements and abruptly moving her left pelvic extremity. She refers that while the physician was doing, she heard something “cracked” she felt the physician was “breaking her bone”. This caused her intense pain, evaluated in EVA7, also causing more pain and difficulty to stand up. The patient says that some minutes after the pain due to those movements, they indicated medical discharge as well as the intake of painkillers and anti-inflammatories.

Five days later, she went to the IMSS for medical revision with her family care physician. The doctor who attended her wrote her medical record in her file, revise her and indicates X-Ray studies, which were scheduled for 3 months later, meaning there were no possibilities of making an actual diagnosis. With no more resources and trusting the times indicated by the treating physicians, she continues with her treatment at home which never fully relieved the main symptoms: pain, decrease of mobility and strength, as well as disability to carry out daily activities.

It took three months to receive another revision by Traumatology and Orthopedics. In this evaluation, she gets her final diagnosis: coxarthrosis with femur fracture, ordering surgery. She started the treatment with painkillers and anti-inflammatories again. This time, she was prescribed: diclofenac 1 every 12 hours, calcium 1 pill per day. For three months, she was in pain for the fracture. The diagnosis was made and informed on July 8, 2013, she was programmed for surgery for July 19, 2013, placing a femoral-head prosthesis together with a treatment with: Celebrex one pill/day, tramadol one pill/day and paracetamol one pill/day.

The truth is that the resident caused my fracture and treated me without any conscience, and the Doctor was always in a mood ...

I lasted 3 months with the fracture and without a diagnosis. The fracture was finally detected on July 8 by the traumatologist who with a simple revision gave a diagnosis and programmed the surgery.

After the surgery I was told not to set my leg to the ground. From week 7 I started to do it bit by bit until I could totally stand on that extremity. From there, I lasted 5 months using a zimmer frame, I went to 12 therapy sessions paid by myself (200 pesos per therapy) because the IMSS had no appointments available until the year 2014.

The truth is that the resident caused my fracture and treated me without any conscience, and the Doctor was always in a mood, she wasn't focused on my condition. The X-Ray wouldn't be useful until August...the one who made the diagnosis was truly a traumatologist.

Material and methods

An analysis of the generated information about a case of coxarthrosis with disabling consequences derived from a non-specialized attention was performed, based on laboratory studies and the statement of the patient.

Results

The patient is on disability leave. Her life style and life quality have been affected because of a femoral fracture caused by a physician who was not a traumatologist. Her experience shows a deficient medical attention, diagnosis mistakes, poor professional capacity of the health care

staff that attended her, delay in her X-Ray studies, and lack of empathy on behalf of the health care staff toward her condition.

Discussion

The professional training of every person in the health care service demands an individual commitment as their practice has an impact of an entire society. Patients trust the health care staff as they are the experts. Patients put their lives in their hands, and even when the physicians are not well trained, he/she tries to explore and learn from the patient instead of assuming his/her role of studying and specializing more every day. This could generate serious problems to the patient's health. The restless need to force movements in the patient without considering the consequences, the lack of empathy to someone else's pain (as it is the case in causing the fracture) are present in this case.

The professional and ethical behavior of a physician must correspond to the search of health recovery, on the contrary, it would be like a mechanic not to be able to fix a car's breaks, leading to the death of the driver or even more people in the car.

How far does professional ethics go in patients that he/she should not attend? Or how well a physician with enough competences can attend a patient? The proposal described herein is then generated through the experience suffered by a patient with left coxarthrosis and femoral-head fracture, caused by a poor health care attention, leading to disability leave, changes in life style and life quality as well as an economic impact trying to recover her health.

A proposal to improve health care quality

A person who studied medicine will have to work according his/her level of competence. There is no degree that covers every field, no one can be good at everything and it is the responsibility of the physician to transfer the patient to the specialist aiming at giving a more accurate diagnosis and a timely treatment. One of the main aspects is the fact that the specialist should be the one who attends the patients. A person who is still studying his/her speciality must not even try to attend the patient.

It is wrong that some health care staff have that job because some relative is working in that same place. It is crucial that job posts in health care are offered and occupied according to the academic profile of the candidates, based on their skills and not on policies. It must not depend on internal policies as it would affect all Mexicans who are paying for those services and are not willing to receive a deficient attention. The suggestion is to guarantee professional equality through public health policies.

-Educational reforms are necessary, under a constructivist model, and it is the same for health; a reform that considers as core idea the quality of the health care services offered to workers, prioritizing the service that the worker needs so he/she does not depend on public

institutions like IMSS or ISSSTE, allowing the workers to decide where they want to be attended depending on their health problems. It is unconceivable that a worker pays for a low-quality, cold and inefficient service. We need to make constitutional reforms to improve quality, to recruit high quality staff, not through internal policies that end up affecting the health of not only one person but a whole society.

Conclusion

The patient is on disability leave. She has a left femoral-head prosthesis derived from a femoral fracture caused by a deficient practice of a resident who was not specialized in traumatology. Training in bioethics involves the continuous search for a better-quality service, with professional and moral values, whatever the profession.

X-Ray description



X-Ray 1. Anteroposterior pelvic X-Ray, with a bad technique, very penetrated, no iliac crest is observed, tool in pelvic hole, in the right hip; no intertrochanteric are is evaluated, it is observed a loss of coxofemoral space, with subchondral sclerosis. Left hip is not visualized.



X-Ray 2. Right anteroposterior hip X-Ray, bad technique, it is observed a solution of continuity of the bone at a basicervical level, it is not observed if the trace extends to the subtrochanteric region. Degenerative changes in the coxofemoral space are observed, with a femoral head flattening.



X-Ray 3. Right anteroposterior hip X-Ray, bad technique, it not observed a complete femoral component, it seems like the acetabular cup in a very vertical position, it should be measured to better evaluate the prosthesis placement. It is needed a pelvis where the left hip appears too.

BIBLIOGRAPHY

- [1] Umberto Tarantino, Monica Celi, Cecilia Rao, Maurizio Feola, Irene Cerocchi, Elena Gasbarra, Amedeo Ferlosio, and Augusto Orlandi. Hip Osteoarthritis and Osteoporosis: Clinical and Histomorphometric Considerations. *International Journal Endocrinology*. 2014
- [2] Simon Dagenais DC, PhD, Shawn Garbedian MD, Eugene K. Wai MD, MSc. Systematic Review of the Prevalence of Radiographic Primary Hip Osteoarthritis. *Clin Orthop Relat Res*. 467:623–637. 2009
- [3] Sandra I. Sulsky, Laura Carlton, Frank Bochmann, Rolf Ellegast, Ulrich Glitsch, Bernd Hartmann, Dirk Pallapies, D. Seidel, Yi Sun. Epidemiological Evidence for Work Load as a Risk Factor for Osteoarthritis of the Hip: A Systematic Review. *PLoS ONE* 7(2): e31521. doi: 10.1371/journal.pone.0031521. 2012
- [4] Macovei L, Brujbu I, Murariu RV. Coxarthrosis-disease of multifactorial. etiology methods of prevention and treatment. The role of kinesitherapy in coxarthrosis. *Rev Med Chir Soc Med Nat Iasi*. Apr-Jun;117(2):351-7. 2013
- [5] Soleimanpour H, Gahramani K, Taheri R, Golzari SE, Safari S, Esfanjani RM, Iranpour A. The effect of low-level laser therapy on knee osteoarthritis: prospective, descriptive study. *Lasers Med Sci*. 2014

Bibliography to broaden the knowledge about bioethics.

1. E. Bonnin Sch. P. Moral de la vida, Manual de bioética teológica. (2007).
2. Reich, Warren Thomas. The world "Bioethics" it's birth and the legacies of those shaped it en Kennedy Institut of Ethics Journal. December, 1994; 4(4): 319-335
3. Lucas Lucas, R. Bioética para todos. Editorial trillas, (2003).
4. Blázquez, Niceto. Bioética fundamental. España: Ed. BAC. (1996).
5. González Kipper L. (2010). Formación de valores. Rojo. Capítulo 4. Evangelizar la vida La Salle. Editorial Didáctica S.A. Monterrey N.L: México.
6. Hernández Arriaga, José Luis (2002). Bioética general. México: Ed. Manual Moderno.
7. Polaino-Lorente, Aquilino (2000). Manual de bioética general. Madrid: Ed. Rialp.
8. Roldán G., J. (1990). Ética médica. México: Librería Parroquial de Clavería.
9. Scola, Ángelo (1999). ¿Qué es la vida?: la bioética a debate. España: Ediciones Encuentro.
10. Sgreccia, Elio. (1999). Manual general de bioética. México: Ed. Diana.