

68 - INCIDENCE OF PATHOLOGIES AND PHYSICAL EXERCISES IN OLDER PEOPLE - A PHYSICAL THERAPY CLINIC EVALUATION

Vera LÍgia Bento Galli, Fabiane Rosa Gioda, Debora Socal Schwertner, Giovana Zarpellon Mazo
University from Santa Catarina State. Florianópolis, Santa Catarina. Brazil.
vlgalli@yahoo.com.br

Introduction

The human aging it's unanswerable. Today, about 12% of world population has more than 60 years, and until 2070 this number will arise for 17%. In Brazil, in agreement for IBGE, there were about 7 million people with larger age or equal 60 years in 1980 year. It's expect that this population will arrive to 34 million of older people in 2025. In the beginning of XX century the life expectancy was around 45 years, reaching 70 years today. Brazil have one of the largest percentile of aging. In 1991, the brazilian life expectancy was 65 years. Today, it is around 68 year-old, and it will be 79 years in 2025 (MAZO, 2004).

The aging is a process of natural wear that it attacks all of the organs in varied proportion, having a considerable difference of one by one (BASSEY, 1998). About muscle skeletal alterations that cause more common muscle-articular pathologies in aging progress, can be mentioned the trabecular and cortical bone loss, vertebral bodies height decrease, vertebral disks height decrease and degeneration, amply joint compression, lumbar lordosis decrease, thoracic cifose increase and decrease of muscles flexibility. Painful experiences are very common and the pain is more related for transmitted tension in joint that activate the receive tensors, that properly caused by degeneration. Than, postural preventive care in association to an appropriate physical activity can reduce the muscle skeletal pain (OLIVER; MIDDLEDITCH, 1998). The importance of correct positioning to do daily activities reflect directly in pain prevention and on emergence of orthopedical problems while time (BIENFAT, 1999).

The pain complaints causes are classified in acute and chronic inflammatory process. The acute processes present signs and intense symptoms and can happen for traumatic lesions, as falls and bruises, or for orthopedical lesions that grow for overload in a specific structure, habitually associated with repetition or execution of certain inadequate movements. Though, the chronic inflammatory process is characterized by smaller intensity inflammatory manifestations with larger period than three months (BIGOS et al, 1994). No rarely, the chronic inflammatory process has intensification of their signs, reacquiring characteristics of an acute process, when it was classified as reacute. This fact is frequently related to the exhibition of the structure attacked for overload factors (BIGOS et al, 1994).

Because multiplicity of pathologies that attack the third age individual, their attendance requests simultaneously a multidisciplinary team, with offer to theirself a curative approach and mainly preventive in primary, secondary and tertiary levels. In this context, the physical therapy performance on treatment of traumatic and orthopedical requests an emergent attitude for pain relief, minimization conducts of complications and physical limitations, in agreement with manifestations and origin of inflammatory case (TAHARA; VIEIRA, 2001).

About individual's physical behavior, we can affirm that several osteo-muscle-articular pathologies begins in childhood and tend to progressive aggravation with while time. Insufficiency in basic physical activities in development process, feeding proteic deficiency, breathing alterations, postural vices, corporal weight in excess, a lot of muscular stretching or shortening, congenital or acquired bone anomalies are some causes of muscle-skeletal disturbances on third age (GROSS; FETTO; ROSEN, 2001).

This study aimed check the incidence of osteo-muscle-articular dysfunctions in an out-physical therapy service on orthopedics, traumatic rheumatology areas and relate these pathologies existence with physical exercises practice.

Method

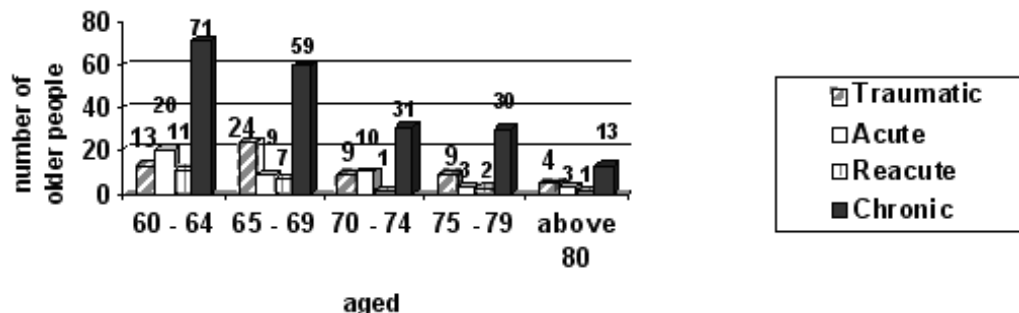
The present study was accomplished at a physical therapy clinic from Itajaí valley - SC. The sample was composed by 330 older people, both gender and aged 60 to 93 years. It was analyzed the patients' handbooks submitted to treatment in January to December- 2003/ 2004 and January to July of 2005 periods, considering for data collection just patient with restricted orthopedical and traumatic diagnosis. It was considered data related for gender, age, pathology, time of pain and physical exercise practice.

The pathologies were classified in: acute - manifestations for a period least than 90 days, chronic - manifestations for a superior period than 90 days, reacute - intense episodes from chronic orthopedical pathologies, with improvement in a short period of time, and traumatic - dysfunctions from falls or bruises. About age, older people in aged 60 to 74 years were classified in older-young, and the ones that presented age equal or superior to 75 years in older-older. Data were statistically treated by SPSS 13.0 software.

Results and Discussion

Most of elderlies (n=252) were in aged 60 to 74 years (older-young group) and 78 were in older-older group, having in both women's predominance about gender.

Both gender presented mainly chronic pathologies. This pathology prevailed in all of age groups, like can be seen in Graph 1.



Graph 1. Relation between pathologies and aged

Graph 1 refers to pathologies classification (traumatic, acute, reacute and chronic) and its relationship with age groups.

In totality of the sample, the pathologies classified as chronicles were the one of larger incidence (61,8%), with detach of low back and knees osteoarthritis. The average time of pain was 7,9 years.

These data agree with literature, because Schainberg (2004) refers that the places more frequently attacked by

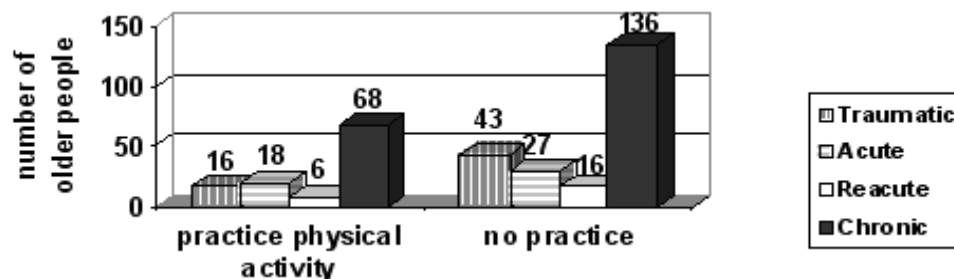
osteoarthritis are axial skeleton joints, especially cervical and low back and the great peripheral joints, hip and knee. In conformity with this author, the main symptoms of osteoarthritis are: pain, rigidity, movements limitation, and deformations, in more advanced phases.

Osteoarthritis is the most frequent disease in human and the largest cause of older people medical consultations. It acts now, in agreement with the World Health Organization, the first cause of physical incapacity in third age people. The life quality damage of older people is direct and representative (ODDIS, 1996).

All older people refer for physical therapy attendance by sequels of traumatic lesions (17,9%), with falls or bruises as causes. The corporal area more affected was one of superior members, mainly in shoulder and forearm, with fractures and damages in soft tissues; following for smaller incidence on inferior members, with knees and ankles fractures and sprains. The falls, in agreement with Sathler (1994), are frequent in older people and their consequences can cause big restriction, in some cases, even fatal. Around 30 to 50% of the falls result in small lesions in soft tissues that don't request medical attention. These data are important 'cause elders who fall once tends to suffer other falls in one year term (PERRACINI, 2000).

In acute pathologies group (13,6%), the most frequent were the vertebral pain, especially from low back and soft tissue inflammations, manifested in a single episode until the data collect moment, and with symptoms duration least than three months. In this group was observed a larger incidence of physical exercises practice, suggesting that occur overload during the execution of this activity or orientation is absent or inadequate. Its very important care for the physical exercises elaboration to older people, 'cause peoples with the same chronological age can have differences in complaints, interest, abilities and physical effort answer (ALVES JÚNIOR, 2001).

About reacute processes (6,7%), it was verified that the places more attacked were knees and shoulder joints, following by low back. In all of cases, the elders already referred to have presented similar acute episode in the affected places, more than three months ago, and that the painful manifestations dysfunctions had regressed considerably, but that, however, perm. Roggato (1996) and Alexander (1994) refer that older people progression of the natural tissues wear can promote the reduction of force, muscular flexibility and bone resistance, associated with a frequent unbalance of the structures attacked by osteo-muscle-articulars chronic pathologies. Than, its belief that this unbalance predisposes the structures to overloads and consequent reacute processes.



Graph 2. Relationship between pathologies and physical activity practice

About physical exercise practice, 32,7% of the sample told regular practice of physical exercise, with walking and water aerobics the modalities more referred.

In elderly patients with chronic pathologies, 20,6% accomplished physical exercise regularly. For elders in treatment for acute pathologies or caused by falls and bruises, 16,7% referred to practice physical exercise, while those with reacute case only 1,8% practising.

Physical inactivity can contribute to gradual decrease of muscle-skeletal mass, force and flexibility that happen with the aging progress, these are the main ones responsible for the mobility, balance and functional capacity deterioration of older people (MATSUDO, 2003).

Despite at physiologic alterations from the aging, the morphologic and functional modifications seem to be associated to the largest tax older people sedentarism, and not only to cellular aging (BARRY; EATHORNE, 1994). For Elon (1996), physiologic functions disuse can create more problems than chronic disease. Most of aging effects happens for the immobility and bad adaptation and not due to the chronic diseases (KURODA; ISRAELL, 1988). A portion what happens with the aging isn't caused by its, but by disuse (SPIRDUSSO; GILLIAM-MACRAE, 1995).

Conclusion

Older people that looked for physical therapy attendance, in majority, had chronic osteo-muscle-articulars pathologies, with old pain complaints and mainly sedentary about physical exercises practice. The regular practice of physical exercises seems to relieve the pain complaints in chronic pathologies, and its lack of orientation can increase acute complaints. Early search for assistance tends decrease pain complaints and its manifestation time.

References

- ALEXANDER, N.B. Postural control in older adults. *Journal of the American Geriatrics Society*, Malden, v.42, p.93-108, 1994.
- ALVES JUNIOR, D. E. Construindo um Programa de Prevenção de Quedas que seja capaz de influir na vida ativa de pessoas com necessidades especiais: Preparando-se para um envelhecimento saudável. Available in <Prevuedas_Pne_Combrance_2001.Pdf - 53k.> Access [junho 2005].
- BARRY, H.C.; EATHORNE, S.W. Exercise and aging: issues for the practitioner. *Med. Clin. North American*, v.78, p. 357-376, 1994.
- BASSEY, E.J. Longitudinal changes in selected physical capabilities: muscle strength, flexibility and body size. *Age and Ageing*, v.27, n. 3, p. 12-16, 1998.
- BIENFAIT, M. *Fáscias e Pompages: Estudo e tratamento do esqueleto fibroso*. São Paulo: Summus, 1999.
- BIGOS, S.J. et al. Acute Low Back Pain Problems in Adults. *Clinical Practice GUIDELINE*, No. 14. AHCPH Publication No. 95-0642. Rockville, MD: Agency for Health Care Policy & Research, 1994.
- ELON, R.D. *Geriatric medicine*. *Brazilian Medicine Journal*, v. 12, p. 561-563, 1996.
- GROSS, J.; FETTO, J.; ROSEN, E. *Exame Músculoesquelético*. São Paulo: Artmed, 2000.
- KURODA, Y.; ISRAELL, S. Sport and physical activities in older people. In: DIRIX, A. (ed). *The Olympic book of sports medicine*. Oxford: Blackwell Scientific Publications, p. 331-355, 1988.
- MATSUDO, S.M.; MATSUDO, V.K.R.; BARROS NETO, T.L.; ARAÚJO, T.L. Evolução do perfil neuromotor e capacidade funcional de mulheres fisicamente ativas de acordo com a idade cronológica. *Rev Bras Med Esporte*, v. 9 n. 6, 2003.
- MAZO, G.Z.; LOPES, M.A.; BENEDETTI, T.B. *Atividade Física e o Idoso- concepção Gerontológica*. 2. ed. Porto Alegre: Sulina, 2004.

ODDIS, C. V. New perspectives on osteoarthritis. The Ann. J. of Med, v. 100. S-2A, p. 105-155, 1996.

OLIVER, J.; MIDDLETCH, A. Anatomia Funcional da Coluna Vertebral. Rio de Janeiro: Revinter, 1998.

PERRACINI, M.R. Fatores associados a quedas em uma coorte de idosos residentes no município de São Paulo [tese]. São Paulo: Universidade Federal de São Paulo; Escola Paulista de Medicina; 2000.

ROGATTO, G.P. Implicações antropométricas (hipertrofia) e funcionais (nível de força) do treinamento de força nos músculos flexores do cotovelo em idosos. 1998. 84f. Monografia (Trabalho de Conclusão de Curso de Educação Física) Instituto de Biociências, Universidade Estadual Paulista, Rio Claro, 1998.

SATHLER J. Cuidados especiais com o idoso no ato cirúrgico. In: Sociedade Brasileira de Geriatria e Gerontologia Jornadas. Rio de Janeiro: LIBBS Farmacêutica 1994. p. 42-3.

SCHAINBERG, C.G. Artrose. Disponível em: <http://www.lincx.com.br/lincx/saude_a_z/outras_doencas/artrose.asp> Access 23 oct 2004

SPIRDUSO, W.W. Physical dimensions of aging. Champaign, Illinois: Human Kinetics, 1995.

TAHARA, T.; VIEIRA, D.A.G. Fisioterapia. In: NETTO, M.P.; BRITO, F.C. Urgências em Geriatria. Epidemiologia, Fisiopatologia, Quando Clínico, Controle Terapêutico. São Paulo: Editora Atheneu, 2001. p. 69-79.

Vera Lúgia Bento Galli CEFID/UEDESC main author

Adress: Engenheiro Máx de Souza Avenue, 1327. Apartament 302. Coqueiros, Florianópolis. Santa Catarina. Brazil. CEP: 88080-000 Fone: (048) 3248-8165

vlgalli@yahoo.com.br

INCIDENCE OF PATHOLOGIES AND PHYSICAL EXERCISES IN OLDER PEOPLE - A PHYSICAL THERAPY CLINIC EVALUATION

Abstract

The aging is product of life habits, behaviors and attitudes. Several pathologies osteo-muscle-rticulars begin in childhood and getting bad with while away. Physical Therapy have an important paper on older people respect a preventive and healing approach. The study aimed check the incidence of osteo-muscle-articulars dysfunctions and relate these pathologies existence with physical exercises practice. It was analyzed the out-patient's handbook from a physical therapy clinic from Itajaí valley, SC, submitted for physical therapy treatment between January/2003 to July/2005. Considered data involve gender, age, pathology, pain time and physical exercise practice. The sample was composed by 320 elders, 219 women and 111 men. These, 61,8% had chronic pathologies with diagnosis of osteoartrosis, especially in low back and knees. The pain time average was 7,9 years; this complaint was classified as continuous, but no very intense. The older people with concussed pathologies (17,9%) had lesions from falls, predominantly resulting in soft parts damages and superior members fractures. The acute pathologies, defined as first pain episode with inferior time of three months, was present in 13,6% of elders. Repetition of acute symptoms was observed in 6,7% of the patients, these relating intense pain. Physical activity was practiced just by 32,7% of elderlies, being more frequent in acute pathologies group and less frequent in group of concussed pathologies. Older people that looked for physical therapy attendance, in majority, had chronic osteo-muscle-articulars pathologies, with old pain complaints and mainly sedentary about physical exercises practice. Early physical therapy search and regular practice of physical exercises is recommended.

Key words: older people, pathologies, physical therapy.

INCIDENCE PHYSIQUE DE PATHOLOGIES ET EXERCISES PHYSIQUES PARMIS LES PERSONNES ÂGÉES ÉVALUATION DANS UNE CLINIQUE DE KINÉSITHÉRAPIE

Résumé

Le vieillissement est le produit d'une vie entière d'habitudes, des comportements et des attitudes. Dans le domaine physique, plusieurs pathologies de l'os, les muscles et les jointures s'initient quand l'enfant est en développement et s'aggravent avec l'âge. La kinésithérapie a un rôle important chez la population âgée dans un abordage préventif et curatif. L'étude a eu pour objectif de vérifier l'incidence de disfonctionnements dans l'os, les muscles et les jointures et de relier l'existence de ces pathologies avec la pratique d'exercices physiques. On a fait l'analyse des manuels des patients d'une clinique de kinésithérapie du Vale do Itajaí, SC, soumis au traitement kinésithérapeute dans les périodes de janvier 2003 à juillet 2005. Les données comme sexe, âge, pathologie, période pratique de douleur et pratique d'exercice physique ont été prises en considération. L'échantillon s'est composé de 320 personnes âgées: 219 femmes et 111 hommes. De ces derniers, 61,8% souffraient des pathologies chroniques en spécial a la colonne lombaire et les genoux. La période moyenne de douleur a été de 7.9 ans et cette plainte était classifiée comme continue, mais pas très intense. Les personnes âgées avec des pathologies traumatologiques (17.9%) ont eu des lésions provenant de chutes, ayant pour résultat des dommages aux parties molles et des fractures des membres supérieurs. Les pathologies aiguës avec le premier épisode de douleur avec un temps inférieur à trois mois ont atteint 13.6% des personnes âgées environ. On a observé le réaggravation des symptômes déjà éprouvés dans d'autres occasions dans 6.7% des patients, ceux-ci se plaignaient de douleur intense. L'activité physique était pratiquée par seulement 32,7% des personnes âgées étant plus fréquente dans les porteurs des pathologies aiguës et moins fréquente dans le groupe avec des pathologies traumatologiques. Les personnes âgées qui ont recherché l'assistance kinésithérapeute, dans sa majorité, étaient des porteurs de pathologies chroniques dans l'os, les muscles et les jointures, avec de vieilles plaintes de douleur et elles ne pratiquaient pas d'exercices physiques. On conseille de chercher précocement un traitement kinésithérapeute et la pratique régulière d'exercices physiques.

Mot-cléf: Pathologies, Personnes Âgées, Kinésithérapie, Exercices physiques.

INCIDENCIA DE PATOLOGÍAS Y EJERCICIOS FÍSICOS EN PERSONAS ADULTAS MAYORES - EVALUACIÓN EN UNA CLÍNICA DE FISIOTERAPIA

Resumen

El envejecimiento es producto de una vida entera de hábitos, conductas y actitudes. En el físico, varias patologías osteo-musculo-articulares empiezan aunque el la infancia y ellos se ponen más peores con avanzar de la edad. La fisioterapia tiene un papel importante junto a la población de adultos mayores en un acercamiento preventivo y curativo. Este estudio tuvo como objetivo verificar la incidencia de trastornos osteo-musculo-articulares de los mayores y relacionar la existencia de estas patologías con la práctica de ejercicios físicos. Fue realizado análisis de las tarjetas de los pacientes de una clínica de fisioterapia del valle de Itajaí, SC, sometidos al tratamiento fisioterápico en los períodos de enero de 2003 a julio de 2005. Fueron considerados los datos sobre sexo, edad, patología, tiempo de dolor y práctica de ejercicio físico. La muestra fue compuesta por 320 mayores, siendo 219 mujeres y 111 varones. De éstos, 61,8% eran portadores de patologías crónicas con diagnóstico del osteoartrosis, sobre todo en la columna lumbar y en las rodillas. El tiempo medio de dolor era de 7,9 años y esta queja era clasificado como continuo, pero ningún muy intenso. Ancianos con patologías traumatológicas (17,9%) tenían lesiones oriundas de caídas, mientras produciendo daño y perjuicios predominantemente en las partes muelles y fracturas de los miembros superiores. Las patologías agudas, con primero episodio del dolor con tiempo inferior a tres meses, alcanzaron

cerca de 13,6% de las personas mayores. Se observó la reagudización de los síntomas en 6,7% de los pacientes, estas quejas presentadas de dolor intenso. La actividad física era hecha por sólo 32,7% de las personas mayores, más frecuente en el grupo portador de patologías agudas y menos frecuente en el grupo de patologías traumatológicas. Las personas mayores que buscaban tratamiento fisioterápico, en su mayoría, eran portadores de patologías osteo-musculo-articulares crónicas, con viejas quejas de dolor y sin practica de ejercicios físicos. La búsqueda temprana de tratamiento fisioterápico se recomienda, así como la practica regular de ejercicios físicos.

Palabras Clave: Personas adultas mayores, patologías, fisioterapia.

INCIDÊNCIA DE PATOLOGIAS E EXERCÍCIOS FÍSICOS EM IDOSOS AVALIAÇÃO EM UMA CLÍNICA DE FISIOTERAPIA

Resumo

O envelhecimento é produto de uma vida inteira de hábitos, comportamentos e atitudes. No físico, várias patologias osteomioarticulares se iniciam ainda quando a criança está em desenvolvimento e se agravam com o avançar da idade. A fisioterapia, têm um importante papel junto à população idosa numa abordagem preventiva e curativa. O estudo teve como objetivo verificar a incidência de disfunções osteomioarticulares e relacionar a existência destas patologias com a prática de exercícios físicos. Realizou-se a análise dos prontuários de pacientes de uma clínica de fisioterapia do Vale do Itajaí, SC, submetidos a tratamento fisioterapêutico nos períodos de janeiro de 2003 a julho de 2005. Consideraram-se dados como sexo, idade, patologia, tempo de dor e prática de exercício físico. A amostra foi composta por 320 idosos, sendo 219 mulheres e 111 homens. Destes, 61,8% eram portadores de patologias crônicas com diagnóstico de osteoartrose, em especial na coluna lombar e nos joelhos. O tempo médio de dor foi de 7,9 anos e esta queixa era classificada como contínua, mas não muito intensa. Os idosos com patologias traumatológicas (17,9%) tiveram lesões provenientes de quedas, resultando em danos nas partes moles e fraturas predominantemente dos membros superiores. As patologias agudas, primeiro episódio de dor com tempo inferior a três meses, atingiram cerca de 13,6% dos idosos. A reagudização dos sintomas já experimentados em outras ocasiões foi observada em 6,7% dos pacientes, estes apresentavam queixas de dor intensa. A atividade física era praticada por apenas 32,7% dos idosos sendo mais freqüente no grupo portador de patologias agudas e menos freqüente no grupo com patologias traumatológicas. Os idosos que buscaram atendimento fisioterapêutico, na sua maioria, eram portadores de patologias osteomioarticulares crônicas, com queixas de dor antigas e não praticavam exercícios físicos. Recomenda-se a procura precoce de tratamento fisioterapêutico e prática regular de exercícios físicos.

Palavras Chave: idosos, patologias, fisioterapia.