

SEPTIEMBRE 2020

**INFORME MENSUAL DE
PUBLICACIONES DE LA
UNIVERSIDAD EN SCOPUS**

**NUEVAS PUBLICACIONES DE LA
UNIVERSIDAD FINIS TERRAE EN LA BASE DE
DATOS SCOPUS DURANTE AGOSTO 2020**

1. Publicado en Revista de Derecho

Revista de Derecho [Open Access](#)

Volume 33, Issue 1, June 2020, Pages 380-383

Adscripción y reacción: Responsabilidad jurídica y moral desde una perspectiva interpersonal

[\(Open Access\)](#)

Barros, J.R.^{a,b} 

 Save all to author list

^aEstudiante de Doctorado, Universidad de Edinburgo, Escocia, United Kingdom

^bInvestigador externo, Universidad Finis Terrae, Chile

Indicadores

SciVal Topic Prominence 

Topic: [Civil Code](#) | [Criminal Law](#) | [Constitutional Courts](#)

Prominence percentile: 70.567  



Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

2. Publicado en ecancermedicallscience

ecancermedicallscience [Open Access](#)

Volume 14, 2020, Article number 1063

The CAPRA-S score versus subtypes of minimal residual disease to predict biochemical failure after radical prostatectomy [\(Article\)](#) [\(Open Access\)](#)


Murray, N.P.^a , Aedo, S.^a, Fuentealba, C.^b, Reyes, E.^{b,c}, Salazar, A.^d, Guzman, E.^e, Orrego, S.^e 

 Save all to author list

^aFaculty of Medicine, University Finis Terrae, Providencia, Santiago, 7501015, Chile

^bUrology Service, Hospital DIPRECA, Las Condes, Santiago, 7770199, Chile

^cFaculty of Medicine, University Diego Portales, Santiago, 7770199, Chile

[View additional affiliations](#) 

Abstract

[View references \(50\)](#)

Objective: The objective of this study was to compare the CAPRA-S score (based on clinicopathological findings) and the subtypes of minimal residual disease (MRD) (based on the biological properties of cancer cells) to predict biochemical failure (BF) after prostatectomy radical. **Patients and methods:** This was a prospective single-centre study of men who underwent radical prostatectomy. One month after surgery, the blood and bone marrow were taken for circulating prostate cell (CPC) and micrometastasis detection, identified using anti-PSA immunocytochemistry and defined as positive or negative. Patients were classified as Group A: CPC and micrometastasis negative, Group B: micrometastasis positive and CPC negative and Group C: CPC positive. CAPRA-S scores were classified as low, intermediate and high risk. Kaplan-Meier curves for biochemical failure-free survival (BFFS) and restricted mean survival time (RMST) to biochemical failure were determined and compared for up to 10 years. **Results:** 347 men participated with a median follow-up of 7 years, BFFS decreased proportionally with increasing CAPRA-S score and HR 1.13 and 1.65 for intermediate and high risk, respectively. After 10 years, the BFFS and RMST were 68%, 47% and 16% and 9, 7 and 6 years, respectively. The BFFS curves for MRD were not proportional; Group A and B BFFSs were similar up to 5 years, and then, there was an increasing failure in Group B patients. After 10 years, the BFFS and RMST were 95%, 57% and 27% and 10, 9 and 6 years respectively. The CAPRA-S score failed to distinguish between Groups A and B, and one-third of high-risk Group C had low-risk CAPRA-S scores. MRD hazard ratios were Group B 1.76 and Group C 4.03. **Conclusions:** The MRD prognostic classification was superior to the CAPRA-S score in predicting BFFS and differentiated between early and late BF. The results need to be confirmed in larger studies. **Copyright:** © the authors; licensee ecancermedicallscience. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Indicadores

SciVal Topic Prominence ⓘ

Topic: Prostatectomy | Surgical Margin | Prostate-Specific Antigen

Prominence percentile: 95.059  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Biochemical failure CAPRA-S score Circulating tumour cells Micrometastasis Minimal residual disease Prostate cancer

Indexed keywords

EMTREE drug terms:

prostate specific antigen

EMTREE medical terms:

adult aged Article biochemical failure free survival biochemical recurrence biological functions
blood sampling bone marrow biopsy cancer cell cancer classification cancer diagnosis
cancer of the prostate risk assessment score cancer prognosis clinical feature cohort analysis controlled study
disease duration disease risk assessment follow up high risk patient human human cell human tissue
immunocytochemistry intermediate risk patient intermethod comparison low risk patient major clinical study
male median survival time micrometastasis middle aged minimal residual disease observational study
prediction prospective study prostate cancer prostate cell prostatectomy

3. Publicado en International Journal of Sport Medicine

International Journal of Sports Medicine

Volume 41, Issue 10, 1 September 2020, Pages 646-651

Role of Basal Hormones on Sweat Rate and Sweat Na⁺ Loss in Elite Women Soccer Players (Article)

Castro-Sepulveda, M.^a , Cancino, J.^a, Jannas-Vela, S.^a, Jesam, F.^a, Lobos, C.^a, Del Coso, J.^b, Zbinden-Foncea, H.^{a,c} 

 Save all to author list

^aSchool of Kinesiology, Laboratorio de Ciencias Del Ejercicio, Facultad de Medicina, Universidad Finis Terrae, Av. Pedro de Valdivia 1509 Providencia, Santiago, Chile

^bCentre for Sport Studies, Rey Juan Carlos University, Fuenlabrada, Madrid, Spain

^cCentro de Salud Deportiva, Clinica Santa Mariá, Santiago, Chile

Abstract


[View references \(33\)](#)

We aimed to determine whether basal concentrations of testosterone, cortisol or the ratio testosterone/cortisol were related to sweat Na⁺ loss, sweat Na⁺ concentration ([Na⁺]) and sweat rate during exercise. Twenty-two female elite soccer players participated in the study. Testosterone and cortisol were measured in blood samples before exercise. Sweat samples were collected during a training session (~20°C, ~30% RH, and ~0.55 m/s of wind speed) to measure sweat [Na⁺]. Sweat rate was determined by considering the difference between post-and pre-body weight, along with the amount of liquid consumed. During exercise, sweat Na⁺ loss (0.33[0.19] g/h) and sweat rate (0.49[0.20] L/h) were related to basal testosterone concentration (1.4[0.4] pg/mL) ($r=0.54$; $r=0.55$, respectively; $p<0.05$), but not with basal cortisol concentration (119.2[24.2] ng/mL) nor testosterone/cortisol ratio (0.012[0.003]) ($p>0.05$). However, when Na⁺ loss was adjusted to sweat rate, no association was found between Na⁺ loss and testosterone ($p>0.05$). In addition, no differences were found between players with high vs. low Na⁺ loss adjusted to sweat loss in menstrual phase or intensity during exercise ($p>0.05$). In conclusion, these results suggest that in these specific environmental conditions, basal levels of testosterone might increase sweat rate and therefore, the amount of Na⁺ lost during exercise in elite women soccer players. © 2020 EDP Sciences. All rights reserved.

Indicadores

SciVal Topic Prominence ⓘ

Topic: Athletes | Magnesium | Exhaustion

Prominence percentile: 71.401  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

hormone concentration hydration status menstrual phase salty sweaters

Indexed keywords

EMTREE drug terms:

hydrocortisone sodium testosterone

EMTREE medical terms:

adult basal metabolic rate blood body mass body weight electrolyte balance female human
menstrual cycle metabolism physiology soccer sweating young adult

MeSH:








Adult Basal Metabolism Body Mass Index Body Weight Female Humans Hydrocortisone Menstrual Cycle
Soccer Sodium Sweating Testosterone Water-Electrolyte Balance Young Adult

4. Publicado en Life


Life [Open Access](#)

Volume 10, Issue 8, August 2020, Article number 153, Pages 1-13

Physical activity, sedentary behavior, and sleep quality in adults with primary hypertension and obesity before and after an aerobic exercise program: Exerdiet-hta study [\(Article\)](#) [\(Open Access\)](#)

Aguirre-Betolaza, A.M.^{a,b} , Mujika, I.^{b,c,d} , Loprinzi, P.^e , Corres, P.^a , Gorostegi-Anduaga, I.^{a,b} , Maldonado-Martín, S.^{a,b}  




 Save all to author list

^aDepartment of Physical Education and Sport, Faculty of Education and Sport-Physical Activity and Sport Sciences Section, University of the Basque Country (UPV/EHU), Vitoria-Gasteiz, Araba/Álava, Basque Country 01007, Spain

^bGizartea, Kirola eta Ariketa Fisikoa Ikerkuntza Taldea (GIKAFIT), Society, Sports, and Physical Exercise Research Group, University of the Basque Country (UPV/EHU), Vitoria-Gasteiz, Araba/Álava, Basque Country 01007, Spain

^cDepartment of Physiology, Faculty of Medicine and Nursing, University of the Basque Country (UPV/EHU), Leioa, Basque Country 48940, Spain

[View additional affiliations](#) 

Abstract

[View references \(53\)](#)

Background: The purposes of the study were to: analyze, by objective (accelerometry) and subjective (International Physical Activity Questionnaire, IPAQ) methodologies, the physical activity (PA) and sedentary behavior (SB) in healthy adults (HEALTHY, n = 30) and individuals with primary hypertension (HTN) and overweight/obesity (n = 218); assess the effects of an aerobic exercise intervention on physical activity (PA), sedentary behavior (SB), and sleep quality in the HTN group; and evaluate the relationship between objectively measured and subjectively reported PA and SB. **Methods:** The measurements were performed before a 16-week exercise intervention period in both HEALTHY and HTN groups and after the intervention period only in the HTN group, randomized to attention control or exercise training (ExT) subgroups. **Results:** The HEALTHY group showed more moderate-to-vigorous PA ($p < 0.05$) and better sleep quality ($p < 0.05$) than the HTN group, but no difference in SB. After the intervention, HTN participants' PA and SB, objectively measured by accelerometry, were unchanged, but increased PA and decreased SB ($p < 0.05$) were observed through IPAQ in ExT. The intervention was effective in improving sleep quality in HTN participants. **Conclusions:** The differences in moderate-to-vigorous PA and SB may be useful in defining the health profile of a population. The supervised aerobic exercise program was effective in increasing PA, reducing SB, and improving sleep quality in overweight/obese adults with HTN. Accelerometer-measured and self-reported data were not comparable, but complementary. © 2020 by the authors. Licensee MDPI, Basel, Switzerland.

Indicadores

SciVal Topic Prominence ⓘ

Topic: Sedentary Lifestyle | Sitting Position | Office Workers

Prominence percentile: 99.385  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Objective measure

Physical inactivity

Questionnaire

Sleep

Supervised exercise

5. Publicado en Journal of Cachexia, Sarcopenia and Muscle




Journal of Cachexia, Sarcopenia and Muscle [Open Access](#)

2020

Generation of desminopathy in rats using CRISPR-Cas9

( Article in press )

([Open Access](#))

Langer, H.T.^a, Mossakowski, A.A.^{a,b}, Willis, B.J.^c, Grimsrud, K.N.^{c,d}, Wood, J.A.^c, Lloyd, K.C.K.^{c,e}, Zbinden-Foncea, H.^f, Baar, K.^{a,g}  


 Save all to author list

^aDepartment of Physiology and Membrane Biology, University of California, Davis, CA, United States

^bDepartment of Neurology with Experimental Neurology, Charité – Universitätsmedizin Berlin, Corporate Member of Freie Universität Berlin, Universität zu Berlin, and Berlin Institute of Health, Humboldt, CA, United States

^cMouse Biology Program, University of California, Davis, CA, United States

[View additional affiliations](#) 


Resumen

Abstract

[View references \(66\)](#)

Background: Desminopathy is a clinically heterogeneous muscle disease caused by over 60 different mutations in desmin. The most common mutation with a clinical phenotype in humans is an exchange of arginine to proline at position 350 of desmin leading to p.R350P. We created the first CRISPR-Cas9 engineered rat model for a muscle disease by mirroring the R350P mutation in humans. **Methods:** Using CRISPR-Cas9 technology, Des c.1045-1046 (AGG > CCG) was introduced into exon 6 of the rat genome causing p.R349P. The genotype of each animal was confirmed via quantitative PCR. Six male rats with a mutation in desmin ($n = 6$) between the age of 120–150 days and an equal number of wild type littermates ($n = 6$) were used for experiments. Maximal plantar flexion force was measured in vivo and combined with the collection of muscle weights, immunoblotting, and histological analysis. In addition to the baseline phenotyping, we performed a synergist ablation study in the same animals. **Results:** We found a difference in the number of central nuclei between desmin mutants ($1 \pm 0.4\%$) and wild type littermates ($0.2 \pm 0.1\%$; $P < 0.05$). While muscle weights did not differ, we found the levels of many structural proteins to be altered in mutant animals. Dystrophin and syntrophin were increased 54% and 45% in desmin mutants, respectively ($P < 0.05$). Dysferlin and Annexin A2, proteins associated with membrane repair, were increased two-fold and 32%, respectively, in mutants ($P < 0.05$). Synergist ablation caused similar increases in muscle weight between mutant and wild type animals, but changes in fibre diameter revealed that fibre hypertrophy in desmin mutants was hampered compared with wild type animals ($P < 0.05$). **Conclusions:** We created a novel animal model for desminopathy that will be a useful tool in furthering our understanding of the disease. While mutant animals at an age corresponding to a preclinical age in humans show no macroscopic differences, microscopic and molecular changes are already present. Future studies should aim to further decipher those biological changes that precede the clinical progression of disease and test therapeutic approaches to delay disease progression. © 2020 The Authors. *Journal of Cachexia, Sarcopenia and Muscle* published by John Wiley & Sons Ltd on behalf of Society on Sarcopenia, Cachexia and Wasting Disorders

Indicadores

SciVal Topic Prominence ⓘ
Topic: Myofibrillar Myopathy | Desmin | Filamins
Prominence percentile: 84.394  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Exercise

Force transfer

Injury

Muscular dystrophy

Precision medicine

6. Publicado en Apuntes

Apuntes

Volume 47, Issue 87, 2020, Pages 65-86

Parents' socialization of values in contemporary Chile: How do social class and parents' religion shape how they raise their children? (Article) (Open Access)

[Preferencias parentales de socialización valórica en el Chile contemporáneo: ¿cómo influyen la clase social y la religión de los padres en la manera en que quieren criar a sus hijos?]

Ramírez, E.S.^a , Berríos, L.^b , de la Cruz, P.S.^c , Cassasa, M.A.^d 

 Save all to author list

^aInvestigador independiente del Centro de Estudios de Investigación sobre Familia, Universidad Finis Terrae, Chile

^bInvestigadora asociada de la Escuela de Educación Parvularia, Universidad Finis Terrae, Chile

^cEscuela de Educación Parvularia, Universidad Finis Terrae, Chile

[View additional affiliations](#) 

Abstract

[View references \(53\)](#)

This study aims to assess the relationship between the variables of social class and religion in parental preferences regarding the socialization of values in contemporary Chile. Employing data from the 5th Metropolitan Survey of Family and Education, logistic models were estimated that show that upper-class families tend to favor more symbolic-relational values such as good manners and respect for others, while lower classes privilege social promotion values such as hard work and saving capacity. Parents who identify as Evangelical Christians, on the other hand, place a firm emphasis on values such as religious belief. © Creative Commons Attribution 3.0.

Indicadores

SciVal Topic Prominence ⓘ

Topic: Personal Values | Transcendence | Universalism

Prominence percentile: 93.163  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Chile

Family

Socialization

Values

7. Publicado en Journal of Information Technology Management

Journal of Information Technology Management [Open Access](#)
Volume 12, Issue 2, 2020, Pages 131-152

The impact of dynamic balanced scorecard in knowledge-intensive organizations' business process management: A new approach evidenced by small and medium-size enterprises in Latin America (Article)

Yanine, F.^a , Cordova, F.M.^b , Duran, C.^c  

 Save all to author list

^aSchool of Engineering, Universidad Finis Terrae, Av. Pedro de Valdivia 1509, Providencia, Santiago, Chile

^bUniversidad Finis Terrae, Av. Pedro de Valdivia 1509, Providencia, Santiago, Chile

^cFaculty of Engineering, Department of Industry, Universidad Tecnológica Metropolitana, Av. José Pedro Alessandri 1242, Ñuñoa, Santiago, Chile

Abstract

[View references \(53\)](#)

Dynamic Balanced Scorecard (DBSC) is an effective business performance management control tool for dealing with business uncertainty, performance monitoring, evaluation and forecasting. DBSC has been proposed and utilized extensively over the years as an effective tool to manage and control the dynamics of business processes (BP) and their performance. However, there is little evidence of its application in knowledge-intensive (KI) organizations and how they can develop and enhance key aspects of their business processes, such as product-service systems innovation, and sustainability, for example. Moreover, the literature does not mention nor does it provide a vision or a DBSC model in cases where business process management (BPM), linked to knowledge creation and organizational transformation initiatives, are factored in the DBSC model. Hence this article explores this vein and aims to demonstrate the advantages of DBSC in this type of scenarios, with stark contrast of failed organizations of the past, particularly in small and medium-size enterprises (SME). Most of the private sector in developing countries like Chile is comprised of SMEs, which thrive and seek to grow sustainably adhering to a global economic trend. The DBSC model being shown here illustrates SMEs strategy, which reveals how intrinsic characteristics of knowledge-intensive organizations can foster sustainability and innovation in BPM. © University of Tehran, Faculty of Management.

Indicadores

SciVal Topic Prominence ⓘ

Topic: Alliance Portfolios | Absorptive Capacity | Open Innovation

Prominence percentile: 99.925  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Business process management

Dynamic Balanced Scorecard (DBSC)

Knowledge-intensive Organizations

Medium-Size Enterprises (SME)

Model

Small

8. Publicado en Journal of Information Technology Management

Journal of Information Technology Management [Open Access](#)
Volume 12, Issue 2, 2020, Pages 153-162

Green energy generation in buildings: Grid-tied distributed generation systems (DGS) with energy storage applications to sustain the smart grid transformation (Article)

Sanchez-Squella, A.^a, Yanine, F.^b , Barrueto, A.^a , Parejo, A.^c  

 Save all to author list

^aDept. of Electrical Engineering, Universidad Técnica Federico Santa María, Santiago, Chile

^bSchool of Engineering, Universidad Finis Terrae, Av. Pedro de Valdivia 1509, Providencia, Santiago, Chile

^cDepartment of Electronic Technology, Escuela Politécnica Superior, University of Seville, Seville, Spain

Abstract

[View references \(20\)](#)

The challenge of electricity distribution's upgrade to incorporate new technologies is big, and electric utilities are mandated to work diligently on this agenda, thus making investments to ensure that current networks maintain their electricity supply commitments secure and reliable in face of disruptions and adverse environmental conditions from a variety of sources. The paper presents a new model based on energy homeostasis for power control and energy management using tariffs differentiation as incentive, considered by ENEL, the largest electric utility in Chile. The model optimizes grid-tied distributed generation (DG) systems with energy storage, in line with the utility's green energy program, part of its Smart Grid Transformation, aimed at installing grid-tied DG systems with solar generation and energy storage in Santiago, Chile. Results present different tariff options, system's capacity and energy storage alternatives, in order to compare proposed strategies with the actual case, where no green energy is present. The results show the advantage of the proposed tariffs scheme and power-energy management model based on different scenarios, providing a good and safe option for installing DG solutions to the grid. © University of Tehran, Faculty of Management.

Indicadores

SciVal Topic Prominence ⓘ

Topic: [Electric Power Distribution](#) | [Energy Systems](#) | [Microgrid](#)

Prominence percentile: 39.039  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Distributed generation

Electric tariffs

Electric utility

Energy homeostasis

Green energy

Power and energy management

9. Publicado en Turkish Journal of Urology

Turkish Journal of Urology [Open Access](#)

Volume 46, Issue 5, 2020, Pages 360-366

The epstein criteria predict for organ-confined prostate cancer but not for minimal residual disease and outcome after radical prostatectomy [\(Article\)](#) [\(Open Access\)](#)

Murray, N.P.^{a,b} , Fuentealba, C.^c, Reyes, E.^{d,e}, Salazar, A.^c, Guzman, E.^b, Orrego, S.^b  

 [Save all to author list](#)

^aFaculty of Medicine, University Finis Terrae, Providencia, Santiago, Chile

^bDepartment of Medicine, Hospitade Carabineros de Chile, Ñuñoa, Santiago, Chile

^cDepartment of Urology, Hospital de Carabineros de Chile, Ñuñoa, Santiago, Chile

[View additional affiliations](#) 

Abstract

[View references \(27\)](#)

Objective: The Epstein criteria (EC) used to select men for active surveillance do not predict biologically insignificant diseases. Minimal residual disease (MRD) is an undetected microscopic disease that remains after radical prostatectomy (RP) and is a biological classification associated with the risk of treatment failure. Subtypes of MRD, the 10-year biochemical failure free survival (BFFS), and restricted mean biochemical failure free survival time (RMST) were determined and compared in EC patients treated with RP. **Material and methods:** Consecutive patients with a Gleason 6 biopsy treated at a single institution were divided into those who did or did not fulfill the EC and underwent RP. One month after surgery, samples were taken for the detection of circulating prostate cells (CPCs) and bone marrow micrometastasis. MRD was defined as negative for both CPCs and micrometastasis; patients were positive for micrometastasis and CPCs separately. BFFS for up to 10 years and RMST were determined for each MRD subgroup for EC positive and negative patients. **Results:** EC positive men (137/426) were significantly older ($p < 0.05$) and had negative MRD, pT2 (pathologically organ confined) disease (< 0.02), and lower frequency of upgrading (< 0.02). Of the EC positive men, 71% were MRD negative, 13% were positive for micrometastasis, and 16% were positive for CPCs with respective 10-year BFFS of 99%, 89%, and 21% (< 0.001) (hazard ratio: 1.00, 1.76, 4.03, respectively) with no significant differences between the 10-year BFFS or RMST for MRD subgroups for EC positive and negative patients. **Conclusions:** EC predict pT2, MRD negative disease; however, 29% are MRD positive with a high risk of treatment failure. © 2020 by Turkish Association of Urology.

Indicadores

SciVal Topic Prominence ⓘ

Topic: [Circulating Neoplastic Cells](#) | [Liquid Biopsy](#) | [Circulating Tumor DNA](#)

Prominence percentile: 99.537  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Biochemical failure free survival

Epstein criteria

Minimal residual disease

Prostate cancer



10. Publicado en Revista Facultad de Medicina

Revista Facultad de Medicina [Open Access](#)

Volume 68, Issue 2, 2020, Pages 222-228

Effects of concurrent chemotherapy and radiotherapy on lung volumes in women with breast cancer living in Talca, Chile (Article) [\(Open Access\)](#)

[Efectos del tratamiento con quimioterapia y radioterapia concomitante sobre los volúmenes pulmonares en mujeres con cáncer de mama en Talca, Chile]


Valverde-Ampai, W.^a, Palma-Rozas, G.^b, Conei, D.^{c,d}, Marzuca-Nassr, G.N.^e, Medinagonzález, P.[†], Escobar-Cabello, M.[†], Sol, M.[§], Muñoz-Cofré, R.[©]  

 Save all to author list

^aUniversidad Finis Terrae, Facultad de Medicina-Magíster en Fisiología Clínica del Ejercicio, Santiago de Chile, Chile

^bHospital Clínico de la Pontificia Universidad Católica, Santiago de Chile, Chile

^cUniversidad de La Frontera, Facultad de Medicina-Doctorado en Ciencias Morfológicas, Temuco, Chile

[View additional affiliations](#) 

Abstract

[View references \(28\)](#)

Introduction: Breast cancer (BC) is the most frequent and lethal chronic non-communicable disease in women, and available information on the impact that the different treatments for BC have on the respiratory system is controversial. Objective: To determine the effect of concurrent chemotherapy and radiotherapy on lung volumes in a group of women with BC living in Talca, Chile. Material and methods: Case-control study. The sample (n=22) was divided into two groups: control (n=11) and BC (n=11). A whole body plethysmography test was used to measure participants' forced vital capacity, lung volumes, and airway resistance. The Shapiro-Wilks test was used to determine the normality of data, and, according to the result of this test, the Student's t test or the Mann-Whitney U test were used. A significance level of $p < 0.05$ was considered. Results: Ventilatory flows showed no significant differences between both groups, while lung volumes in the BC group experienced a significant decrease in the inspiratory capacity (IC) and residual volume (RV) variables ($p < 0.05$). Conclusion: Compared to the CG, the women with BC who received concurrent chemotherapy and radiotherapy experienced a reduction of their IC and RV, which could affect their quality of life. © 2020, Universidad Nacional de Colombia. All rights reserved.

Indicadores

SciVal Topic Prominence ⓘ

Topic: Radiation Pneumonia | Esophagitis | Lung Injury

Prominence percentile: 92.808  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

Breast Cancer

Inspiratory Capacity



Radiotherapy



Residual Volume (MeSH)


11. Publicado en Scandinavian Journal of Medicine and Science Sports

Scandinavian Journal of Medicine and Science in Sports
2020

Contralateral effects of eccentric resistance training on immobilized arm

( Article in press )


Valdes, O.^{a,b}, Ramirez, C.^a, Perez, F.^a, Garcia-Vicencio, S.^c, Nosaka, K.^d, Penailillo, L.^a  

 Save all to author list

^aExercise Science Laboratory, School of Kinesiology, Faculty of Medicine, Universidad Finis Terrae, Santiago, Chile

^bFaculty of Health Sciences, Universidad de las Américas, Santiago, Chile

^cPhysiology of Exercise and Activities in Extreme Conditions Unit, Operational Environments Department, French Armed Forces Biomedical Research Institute (IRBA), Brétigny sur Orge, France

[View additional affiliations](#) 

Abstract

[View references \(39\)](#)

This study compared the effects of contralateral eccentric-only (ECC) and concentric-/eccentric-coupled resistance training (CON-ECC) of the elbow flexors on immobilized arm. Thirty healthy participants (18-34 y) were randomly allocated to immobilization only (CTRL; n = 10), immobilization and ECC (n = 10), or immobilization and CON-ECC group (n = 10). The non-dominant arms of all participants were immobilized (8 h · day⁻¹) for 4 weeks, during which ECC and CON-ECC were performed by the dominant (non-immobilized) arm 3 times a week (3-6 sets of 10 repetitions per session) with an 80%-120% and 60%-90% of one concentric repetition maximum (1-RM) load, respectively, matching the total training volume. Arm circumference, 1-RM and maximal voluntary isometric contraction (MVIC) strength, biceps brachii surface electromyogram amplitude (sEMG_{RMS}), rate of force development (RFD), and joint position sense (JPS) were measured for both arms before and after immobilization. CTRL showed decreases (P <.05) in MVIC (-21.7%), sEMG_{RMS} (-35.2%), RFD (-26.0%), 1-RM (-14.4%), JPS (-87.4%), and arm circumference (-5.1%) of the immobilized arm. These deficits were attenuated or eliminated by ECC and CON-ECC, with greater effect sizes for ECC than CON-ECC in MVIC (0.29: +12.1%, vs -0.18: -0.1%) and sEMG_{RMS} (0.31:17.5% vs -0.15: -5.9%). For the trained arm, ECC showed greater effect size for MVIC than CON-ECC (0.47 vs 0.29), and increased arm circumference (+2.9%), sEMG_{RMS} (+77.9%), and RFD (+31.8%) greater (P <.05) than CON-ECC (+0.6%, +15.1%, and + 15.8%, respectively). The eccentric-only resistance training of the contralateral arm was more effective to counteract the negative immobilization effects than the concentric-eccentric training. © 2020 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd

Indicadores

SciVal Topic Prominence ⓘ

Topic: Strength Training | Transcranial Magnetic Stimulation | Flexors

Prominence percentile: 74.232  ⓘ

Sobre el momentum que viven las materias tratadas en este texto y sus palabras claves

Palabras clave y descriptores

Author keywords

arm circumference cross-education effect elbow flexors electromyography interlimb transfer joint position sense muscle strength
rate of force development

Indexed keywords

EMTREE medical terms:

adult arm circumference article biceps brachii muscle clinical article controlled study education effect size
elbow electromyogram electromyography female human human experiment immobilization male
muscle isometric contraction muscle strength randomized controlled trial resistance training

FORMAS DE BUSCAR EN LA BASE DE DATOS SCOPUS:

POR INSTITUCIÓN

Puedes realizar búsquedas por instituciones, de esta forma conocer en qué área del conocimiento tienen mayor productividad

MATERIAS O PALABRAS CLAVES

Realiza este tipo de búsquedas para encontrar la mayor cantidad de material desarrollado en tu área de interés y averiguar cuanto ha crecido el tema en los últimos años.

POR AUTOR

Busca investigadores que te interesan y podrás averiguar su grado de productividad e impacto.