Comprehensive multimodal surgical treatment of end-stage lower extremity lymphedema with toe management: The combined Charles,' Homan's, and vascularized lymph node transfer (CHAHOVA) procedures.

Ciudad P, Agko M, Huang TCT, Manrique OJ, Chang WL, Nicoli F, Maruccia M, Lo Torto F, Chen HC.

J Surg Oncol. 2019 Jan 6.

Abstract

BACKGROUND: End-stage lower extremity lymphedema (LEL) poses a particularly formidable challenge to surgeons as multiple pathological processes are at work. Because single modality treatment is often unsuccessful, we devised a comprehensive multimodal surgical treatment. The aim of this study is to share the technical considerations and examine the clinical outcomes of this combined approach. METHODS: Between 2013 and 2017, patients with International Society of Lymphology stage III, who underwent the combination treatment of Charles,' Homan's procedure with toe management and vascularized lymph node transfer (CHAHOVA), were included in this retrospective study. Outcomes evaluated were limb size, number of infectious episodes, compression garment usage, and rate of complications. RESULTS: A total of 68 patients were included. With a mean follow-up of 29 months, the overall circumference reduction rate for the upper thigh and the rest of the extremity was 67.4% (48.2-88.2%) and 98.1% (88-100%), respectively. During the follow-ups, 2 (2.9%) patients experienced episodes of cellulitis and the average number of yearly infections decreased from 4.2 to 1.2 episodes per person. All patients were able to discontinue compression therapy without recurrence of lymphedema. Nine (13.2%) patients reported minor complications. CONCLUSION: The combine CHAHOVA in a single-stage procedure is an effective and safe approach in the end-stage LEL.

Combined double vascularized lymph node transfers and modified radical reduction with preservation of perforators for advanced stages of lymphedema.

Ciudad P, Manrique OJ, Adabi K, Huang TC, Agko M, Trignano E, Chang WL, Chen TW, Salgado CJ, Chen HC.

J Surg Oncol. 2019 Jan 4.

Abstract

BACKGROUND: Treatment of advanced lymphedema requires not only restoration of physiological lymph drainage, but also excision of fibrotic tissue and excess skin. The aim of this study is to show how the combination of double vascularized lymph node transfers (VLNTs) and a modified radical reduction with preservation of perforators (RRPP) can accomplish both of these treatment goals. METHODS: Between 2010 and 2016, 16 patients (15 female and one male) with extremity lymphedema underwent a combined double gastroepiploic VLNTs and modified RRPP. Demographics, outcomes including circumference reduction rates, preoperative and postoperative lymphoscintigraphy, complications, and responses to the Lymphedema Quality of Life (LYMQOL) questionnaire were analyzed. RESULTS: All flaps survived. The mean follow-up period was 14.2 months (range, 12-19). The mean circumference reduction rate was 74.5% ± 6.9% for the upper limb and 68.0% ± 4.2% for the lower limb. There were no major complications. Minor complications, including numbness and hyperesthesia, were treated conservatively. LYMQOL showed a 2.7-fold quality-of-life improvement ($P < 0.01$). Postoperative lymphoscintigraphy showed improved lymphatic drainage in all cases. CONCLUSION: Combined double VLNTs and modified RRPP safely and effectively improves lymphatic drainage, reduces fibrotic tissue and excess skin, decreases episodes of infections, and improves patients' quality of life in the advanced stages of lymphedema.

Expanding the applications of the combined transverse upper gracilis and profunda artery perforator (TUGPAP) flap for extensive defects.

Ciudad P, Huang TC, Manrique OJ, Agko M, Sapountzis S, Nicoli F, Diya Sabbagh M, Pont LP, Moran SL, Chen HC.

Microsurgery. 2018 Dec 17.

Abstract

BACKGROUND: The medial thigh is a well-hidden area. The two most common flaps from this area are the transverse upper gracilis (TUG) and profunda artery perforator (PAP) flaps. Herein, we explored the applications of combined TUGPAP flap to reconstruct large and complex defects in different regions. METHODS: Between November 2015 and May 2017, 28 patients who underwent reconstruction and extensive soft tissue coverage with the TUGPAP flap for the breasts, head and neck, and pelvi-perineal regions were included. The defects size ranged from 22 to 29 × 6-8 cm. All flaps were based on the two pedicles: the medial circumflex femoral artery for TUG flap and the profunda artery perforator for PAP flap. They were each anastomosed to a set of recipient vessels. A "Y"-shaped interposition vein graft (YVG) was used if only one recipient artery was available. RESULTS: The harvested skin paddle had dimensions ranged from 20 to 30 × 6-9 cm and all flaps survived completely. Postoperative complications included one case each of donor and recipient site seroma, and one case of wound dehiscence. They were all successfully managed conservatively. During an average follow-up period of 12.7 months, one patient reported permanent paresthesia in the donor site and another developed hypertrophic scar. All patients were able to resume daily activity without major concerns. CONCLUSION: The combined TUGPAP flap is a safe, effective, and a good alternative to the common workhorse flaps as it offers the potential for a large skin paddle and decent soft tissue volume with low donor site morbidity in a well-concealed area.

Current situation of soft tissue sarcomas: Registry of a Latin American cancer institute.

Chávez M, Ziegler G, Cotrina J, Galarreta J, de la Cruz M, Mantilla R.

Cir Esp. 2019 Feb 16.

Abstract

INTRODUCTION: Soft tissue sarcomas (SFT) are a group of rare and heterogeneous neoplasms (representing less than 1% of cancer in adults and 15% in pediatric patients), for which there is no updated records in the Latin American population. This study aims to describe the current situation of patients treated at a cancer institute in Latin America. METHODS: We obtained records from 250 patients with a diagnosis of SFT, treated at the National Institute of Neoplastic Diseases of Peru (INEN) during the period 2009-2013, with a mean follow-up of 62 months. The following data were recorded: epidemiological, clinical, treatment and follow-up. The analysis of global survival was done with the Cox proportional hazards model. RESULTS: SFT showed a greater frequency in males (60.8%), with a peak incidence after 50 years of age (69.6%). Tumor location was predominantly in the lower extremities (64.4%), and the most frequent histologic subtypes were: undifferentiated pleomorphic sarcoma (34%) and liposarcomas (25.6%); clinical stage iii was the most frequent (30.8%). The 5-year overall survival rate was 63.9%, while the statistical analysis found a significant association between global survival and the variables: age (>50 years), tumor size (>5cm), depth (subfascial), histologic grade (G3), local and distant recurrence, showing shorter survival times in these groups. CONCLUSIONS: This study has clarified the epidemiology, treatment and prognosis, as well as the variables that have an impact on the survival of the Latin American patients with SFT studied.

Barriers in Latin America for the management of locally advanced breast cancer.

Pinto JA, Pinillos L, Villarreal-Garza C, Morante Z, Villarán MV, Mejía G, Caglevic C, Aguilar A, Fajardo W, Usuga F, Carrasco M, Rebaza P, Posada AM, Tirado-Hurtado I, Flores C, Vallejos CS.

Ecancermedicalscience. 2019 Jan 22;13:897.

Abstract

Breast cancer (BC) is a highly prevalent malignancy in Latin American women, most cases being diagnosed at locally advanced or metastatic stages when options for cancer care are limited. Despite its label as a public health problem in the region, Latin American BC patients face several barriers in accessing standard of care treatment when compared with patients from developed countries. In this review, we analyse the landscape of the four main identified barriers in the region: i) high burden of locally advanced/advanced BC; ii) inadequate access to medical resources; iii) deficient access to specialised cancer care and iv) insufficient BC research in Latin America. Unfortunately, these barriers represent the main factors associated with the BC poor outcomes seen in the region. Targeted actions should be conducted independently by each country and as a region to overcome these limitations and create an enhanced model of BC care.

Precision medicine for locally advanced breast cancer: frontiers and challenges in Latin America.

Pinto JA, Saravia CH, Flores C, Araujo JM, Martínez D, Schwarz LJ, Casas A, Bravo L, Zavaleta J, Chuima B, Alvarado H, Fujita R, Gómez HL.

Ecancermedicalscience. 2019 Jan 22;13:896.

Abstract

Advances in high-throughput technologies and their involvement in the 'omics' of cancer have made possible the identification of hundreds of biomarkers and the development of predictive and prognostic platforms that model the management of cancer from evidence-based medicine to precision medicine. Latin America (LATAM) is a region characterised by fragmented healthcare, high rates of poverty and disparities to access to a basic standard of care not only for cancer but also for other complex diseases. Patients from the public setting cannot afford targeted therapy, the facilities offering genomic platforms are scarce and the use of high-precision radiotherapy is limited to few facilities. Despite the fact that LATAM oncologists are well-trained in the use of genomic platforms and constantly participate in genomic projects, a medical practice based in precision oncology is a great challenge and frequently limited to private practice. In breast cancer, we are waiting for the results of large basket trials to incorporate the detection of actionable mutations to select targeted treatments, in a similar way to the management of lung cancer. On the other hand and paradoxically, in the 'one fit is not for all' era, clinical and genomic studies continue grouping our patients under the single label 'Latin American' or 'Hispanic' despite the different ancestries and genomic backgrounds seen in the region. More regional cancer genomic initiatives and public availability of this data are needed in order to develop more precise oncology in locally advanced breast cancer.

Relationship between tumor-associated immune infiltrate and p16 staining over clinicopathological features in acral lentiginous melanoma.

Castaneda CA, Castillo M, Torres-Cabala C, Bernabe LA, Casavilca S, Villegas V, Sanchez J, de la Cruz M, Dunstan J, Cotrina JM, Gomez HL, Chavez C, Landa-Baella MP, Tello K, Felix BF, Abugattas J.

Clin Transl Oncol. 2019 Feb 16.

Abstract

PURPOSE: This study aims to evaluate the association between composition of tumor-infiltrating lymphocytes (TIL) and expression of p16 in acral lentiginous melanoma (ALM), and their impact on prognosis. MATERIALS AND METHODS: A cohort of 148 surgical pathology specimens of ALM was studied. TIL were evaluated by immunohistochemical detection of CD3 and CD8, along with CD20, CD4, CD68, and CD163 in a subset of 43 cases. p16 protein expression was also investigated in all the cases. RESULTS: The median age was 66 years, median Breslow thickness was 6.0 mm, grade III TIL was found in 28.4% and lymph nodes were involved in 54.2%. Breslow thickness ($p < 0.001$), stage I-II ($p < 0.001$), negative lymph nodes ($p < 0.001$) and < 10% p16 ($p = 0.01$) were associated with longer survival. Grade III of TIL was associated with thinner Breslow thickness ($p = 0.008$) and lower mitosis ($p = 0.047$). A higher density of CD3 TIL was associated with male gender ($p = 0.008$), thinner Breslow thickness ($p = 0.047$), negative lymph node ($p = 0.031$), early stage ($p = 0.046$), and p16 nuclear expression of > 10% ($p = 0.045$). Higher CD8 TIL was associated with > p16 ($p = 0.03$). Survival analysis found that longer survival had a trend to be associated with high TIL ($p = 0.090$). Levels of CD3+ and CD8+ cells were correlated with those of CD4+, CD20+, CD68+ and CD163+ immune cells. CONCLUSIONS: Higher levels of TIL tend to be associated with better overall survival in ALM. Loss of expression of p16 is associated with lower levels of CD3+ and CD8+ TIL, indicating a probable relationship between p16 and TIL immune response in ALM .

Quality of life under extended continuous versus intermittent adjuvant letrozole in lymph node-positive, early breast cancer patients: the SOLE randomised phase 3 trial.

Ribi K, Luo W, Colleoni M, Karlsson P, Chirgwin J, Aebi S, Jerusalem G, Neven P, Di Lauro V, Gomez HL, Ruhstaller T, Abdi E, Biganzoli L, Müller B, Barbeaux A, Graas MP, Rabaglio M, Francis PA, Foukakis T, Pagani O, Graiff C, Vorobiof D, Maibach R, Di Leo A, Gelber RD, Goldhirsch A, Coates AS, Regan MM, Bernhard J; SOLE Investigators.

Br J Cancer. 2019 Apr 10.

Abstract

BACKGROUND: In the phase III SOLE trial, the extended use of intermittent versus continuous letrozole for 5 years did not improve disease-free survival in postmenopausal women with hormone receptor-positive breast cancer. Intermittent therapy with 3-month breaks may be beneficial for patients' quality of life (QoL). METHODS: In the SOLE QoL sub-study, 956 patients completed the Breast Cancer Prevention Trial (BCPT) symptom and further QoL scales up to 24 months after randomisation. Differences in change of QoL from baseline between the two administration schedules were tested at 12 and 24 months using repeated measures mixed-models. The primary outcome was change in hot flushes at 12 months. RESULTS: There was no difference in hot flushes at 12 months between the two schedules, but patients receiving intermittent letrozole reported significantly more improvement at 24 months. They also indicated less worsening in vaginal problems, musculoskeletal pain, sleep disturbance, physical well-being and mood at 12 months. Overall, 25-30% of patients reported a clinically relevant worsening in key symptoms and global QoL. CONCLUSION: Less symptom worsening was observed during the first year of extended treatment with the intermittent administration. For women experiencing an increased symptom burden of extended adjuvant endocrine therapy, an intermittent administration is a safe alternative.

Factores de pronóstico en pacientes con cáncer de mama metastásico sometidos a cirugía.

Pamela Rebaza, Gabriela Calderon, Miguel de la Cruz, Jorge Dunstan, José M. Cotrina, Julio Abugattas, Henry Gomez, Henry Guerra, Connie Rabanal, Joselyn Sánchez, Carolina Belmar-Lopez, Valeria Villegas, Miluska Castillo, Carlos Chavez, Carlos A. Castañeda.

Carcinos 2018; 8(2): 51-60.

Abstracto

INTRODUCCIÓN: El manejo quirúrgico de del tumor primario en pacientes con cáncer de mama metastásico es controversial, es por ello que se necesita identificar que variables podrían seleccionar a las pacientes que se verían beneficiadas. OBJETIVO: Identificar factores de pronósticos en pacientes con cáncer de mama metastásico que fueron sometidos a cirugía de tumor primario. MÉTODOS: Estudio observacional y retrospectivo de pacientes con cáncer de mama en estadio IV con cirugía de tumor primario realizado en el Instituto Nacional de Enfermedades Neoplásicas (INEN) durante el período 2008 - 2013. RESULTADOS: Se evaluaron 69 pacientes con una mediana de edad de 50 años. Se encontró una mediana de sobrevida global (SG) de 4,09 años. La frecuencia de receptor estrógeno (RE) positivo fue 72,5%. Las localizaciones más frecuentes de metástasis fueron hueso (28,9%), ganglios linfáticos (10,1%) y pulmón (17,4%); asimismo, se reportaron metástasis múltiples en el 34,8% de pacientes. Los tratamientos de primera línea más frecuentes se basaron en quimioterapia (86,9%), y la mayoría incluyó doxorrubicina (72,5%) y/o paclitaxel (59,4%). La presencia del RE y receptor de progesterona (RPg) ($p<0,001$), el subtipo luminal B ($p<0,001$), la terapia hormonal adyuvante ($p<0,001$), la metástasis no visceral ($p=0,017$) y la sobrevida libre de progresión (SLP) prolongada ($p<0,01$) se asociaron a una mayor SG. CONCLUSIONES: Los factores relacionados con una mayor sobrevida de los pacientes con cáncer de mama metastásico que tuvieron cirugía son: la presencia de RE y RPg, el subtipo luminal, la ubicación de la metástasis (ósea-ganglionar-pulmonar), la metástasis no visceral, la terapia hormonal después de la cirugía, y la SLP prolongada. Pese a esto, aún falta definir el real impacto que tiene la cirugía en este tipo de pacientes y en el grupo potencialmente curable.

Breast cancer PAM50 signature: correlation and concordance between RNA-Seq and digital multiplexed gene expression technologies in a triple negative breast cancer series.

Picornell AC, Echavarria I, Alvarez E, López-Tarruella S, Jerez Y, Hoadley K, Parker JS, Del Monte-Millán M, Ramos-Medina R, Gayarre J, Ocaña I, Cebollero M, Massarrah T, Moreno F, García Saenz JA, Gómez Moreno H, Ballesteros A, Ruiz Borrego M, Perou CM, Martin M.

BMC Genomics. 2019 Jun 3;20(1):452.

Abstract

BACKGROUND: Full RNA-Seq is a fundamental research tool for whole transcriptome analysis. However, it is too costly and time consuming to be used in routine clinical practice. We evaluated the transcript quantification agreement between RNA-Seq and a digital multiplexed gene expression platform, and the subtype call after running the PAM50 assay in a series of breast cancer patients classified as triple negative by IHC/FISH. The goal of this study is to analyze the concordance between both expression platforms overall, and for calling PAM50 triple negative breast cancer intrinsic subtypes in particular. RESULTS: The analyses were performed in paraffin-embedded tissues from 96 patients recruited in a multicenter, prospective, non-randomized neoadjuvant triple negative breast cancer trial (NCT01560663). Pre-treatment core biopsies were obtained following clinical practice guidelines and conserved as FFPE for further RNA extraction. PAM50 was performed on both digital multiplexed gene expression and RNA-Seq platforms. Subtype assignment was based on the nearest centroid classification following this procedure for both platforms and it was concordant on 96% of the cases (N = 96). In four cases, digital multiplexed gene expression analysis and RNA-Seq were discordant. The Spearman correlation to each of the centroids and the risk of recurrence were above 0.89 in both platforms while the agreement on Proliferation Score reached up to 0.97. In addition, 82% of the individual PAM50 genes showed a correlation coefficient > 0.80. CONCLUSIONS: In our analysis, the subtype calling in most of the samples was concordant in both platforms and the potential discordances had reduced clinical implications in terms of prognosis. If speed and cost are the main driving forces then the preferred technique is the digital multiplexed platform, while if whole genome patterns and subtype are the driving forces, then RNA-Seq is the preferred method.

Clinical and Genomic Risk to Guide the Use of Adjuvant Therapy for Breast Cancer.

Sparano JA, Gray RJ, Ravdin PM, Makower DF, Pritchard KI, Albain KS, Hayes DF, Geyer CE Jr, Dees EC, Goetz MP, Olson JA Jr, Lively T, Badve SS, Saphner TJ, Wagner LI, Whelan TJ, Ellis MJ, Paik S, Wood WC, Keane MM, Gomez Moreno HL, Reddy PS, Goggins TF, Mayer IA, Brufsky AM, Toppmeyer DL, Kaklamani VG, Berenberg JL, Abrams J, Sledge GW Jr.

N Engl J Med. 2019 Jun 20;380(25):2395-2405.

Abstract

BACKGROUND: The use of adjuvant chemotherapy in patients with breast cancer may be guided by clinicopathological factors and a score based on a 21-gene assay to determine the risk of recurrence. Whether the level of clinical risk of breast cancer recurrence adds prognostic information to the recurrence score is not known. METHODS: We performed a prospective trial involving 9427 women with hormone-receptor-positive, human epidermal growth factor receptor 2-negative, axillary node-negative breast cancer, in whom an assay of 21 genes had been performed, and we classified the clinical risk of recurrence of breast cancer as low or high on the basis of the tumor size and histologic grade. The effect of clinical risk was evaluated by calculating hazard ratios for distant recurrence with the use of Cox proportional-hazards models. The initial endocrine therapy was tamoxifen alone in the majority of the premenopausal women who were 50 years of age or younger. RESULTS: The level of clinical risk was prognostic of distant recurrence in women with an intermediate 21-gene recurrence score of 11 to 25 (on a scale of 0 to 100, with higher scores indicating a worse prognosis or a greater potential benefit from chemotherapy) who were randomly assigned to endocrine therapy (hazard ratio for the comparison of high vs. low clinical risk, 2.73; 95% confidence interval [CI], 1.93 to 3.87) or to chemotherapy plus endocrine (chemoendocrine) therapy (hazard ratio, 2.41; 95% CI, 1.66 to 3.48) and in women with a high recurrence score (a score of 26 to 100), all of whom were assigned to chemoendocrine therapy (hazard ratio, 3.17; 95% CI, 1.94 to 5.19). Among women who were 50 years of age or younger who had received endocrine therapy alone, the estimated (±SE) rate of distant recurrence at 9 years was less than 5% (≤1.8±0.9%) with a low recurrence score (a score of 0 to 10), irrespective of clinical risk, and 4.7±1.0% with an intermediate recurrence score and low clinical risk. In this age group, the estimated distant recurrence at 9 years exceeded 10% among women with a high clinical risk and an intermediate recurrence score who received endocrine therapy alone (12.3±2.4%) and among those with a high recurrence score who received chemoendocrine therapy (15.2±3.3%). CONCLUSIONS: Clinical-risk stratification provided prognostic information that, when added to the 21-gene recurrence score, could be used to identify premenopausal women who could benefit from more effective therapy.

Cáncer de mama en mujeres adultas mayores: análisis del Registro de cáncer de base poblacional de Lima Metropolitana.

Jorge Luna-Abanto.

Acta Médica Peruana. 2019 Mar; 36(1), 72-73.

Abstracto

El cáncer de mama es la neoplasia más frecuente en mujeres peruanas; además, es la primera causa de muerte en este sexo según el Registro de cáncer de base poblacional de Lima Metropolitana, resultado que es similar a lo reportado a nivel mundial. En la actualidad, el tamizaje para la detección de cáncer de mama es recomendado a mujeres de entre los 50 y 74 años mediante la toma de mamografía bianual. El Perú ha adoptado lo indicado en guías internacionales y reconoce esta prueba es costo-efectiva frente a otras; sin embargo, excluye de la toma de mamografía a aquellas mujeres mayores de 75 años, pues no hay evidencia suficiente que respalde su uso masivo.

A polygenic risk score for breast cancer in U.S. Latinas and Latin-American women.

Yiwey Shieh, Laura Fejerman1, Paul C. Lott, Katie Marker, Sarah D. Sawyer, Donglei Hu, Scott Huntsman, Javier Torres, Magdalena Echeverry, Mabel E. Bohorquez, Juan Carlos MartínezChéquer, Guadalupe Polanco-Echeverry, Ana P. Estrada-Florez, Christopher A. Haiman, Esther M. John, Lawrence H. Kushi, Gabriela Torres-Mejía, Tatianna Vidaurre, Jeffrey N. Weitzel, Sandro Casavilca Zambrano, Luis G. Carvajal-Carmon, Elad Ziv, Susan L. Neuhausen.

bioRxiv, 2019, p. 598730.

Abstract

Background: Over 180 single nucleotide polymorphisms (SNPs) associated with breast cancer susceptibility have been identified; these SNPs can be combined into polygenic risk scores (PRS) to predict breast cancer risk. Since most SNPs were identified in predominantly European populations, little is known about the performance of PRS in non-Europeans. We tested the performance of a 180-SNP PRS in Latinas, a large ethnic group with variable levels of Indigenous American, European, and African ancestry. Methods: We conducted a pooled case-control analysis of U.S. Latinas and Latin-American women (4,658 cases, 7,629 controls). We constructed a 180-SNP PRS consisting of SNPs associated with breast cancer risk ($p < 5 \times 10-8$). We evaluated the association between the PRS and breast cancer risk using multivariable logistic regression and assessed discrimination using area under the receiver operating characteristic curve (AUROC). We also assessed PRS performance across quartiles of Indigenous American genetic ancestry. Results: Of 180 SNPs tested, 140 showed directionally consistent associations compared with European populations, and 43 were nominally significant ($p < 0.05$). The PRS was associated with breast cancer risk, with an odds ratio (OR) per standard deviation increment of 1.58 (95% CI 1.52-1.64) and AUCROC of 0.63 (95% CI 0.62 to 0.64). The discrimination of the PRS was similar between the top and bottom quartiles of Indigenous American ancestry. Conclusions: The 180-SNP PRS predicts breast cancer risk in Latinas, with similar performance as reported for Europeans. The performance of the PRS did not vary substantially according to Indigenous American ancestry.

Síndrome músculo esquelético asociado a los inhibidores de la aromatasa en pacientes postmenopáusicas con cáncer de mama receptor hormonal positivo.

Luis A. Chirinos, Fernando Valencia, Henry L. Gomez.

Carcinos 2018; 8(2): 88-93.

Abstracto

Los inhibidores de la aromatasa (AIs) son actualmente el tratamiento adyuvante de primera línea para el cáncer de mama receptor hormonal positivo en las mujeres postmenopáusicas; sin embargo, la mayoría de las pacientes tratadas con AIs descontinúan el tratamiento debido a la aparición del síndrome músculo esquelético asociado a los inhibidores de la aromatasa (AIMSS), el cual caracterizado por dolores musculares y articulares, y en algunos casos, predisponiendo a un aumento en la incidencia de fracturas durante el tratamiento. Actualmente, hay información limitada sobre los factores de riesgo asociados a esta patología, así como un criterio estandarizado para identificarlos; es por ello que esta revisión se centrará en presentar la principal información sobre AIMSS, sus factores de riesgo y el manejo médico para tratarlo.

Role of undifferentiation markers and androgen receptor expression in triple-negative breast cancer.

Castaneda CA, Castillo M, Enciso JA, Enciso N, Bernabe LA, Sanchez J, Guerra H, Chavez C, Landa-Baella M, De-La-Cruz M, Villa-Robles M, Tello K, Gomez HL.

Breast J. 2019 Jul 22.

Abstract

Triple-negative breast cancer (TNBC) is associated with high cell proliferation and distant metastasis rates. Androgen receptor (AR) is a member of the nuclear steroid receptor subfamily related to regulation of cell proliferation and presents functional and structural similarity to estrogen receptor (ER). AR expression in TNBC appears to predict response to antiandrogen treatment (rates: 0%-53%). ALCAM belongs to the immunoglobulin superfamily of adhesion molecules and has been associated with cancer cell apoptosis, motility, and invasive potential. Its expression in breast cancer (BC) is associated with aggressive clinicopathological features. Dai et al found that ALCAM is a negative prognosis marker, and its combination with other three genes related to cancer hallmarks is equivalent to previously identified 1015 genes for BC subtyping and has a remarkable role in distinguishing TNBC subtype.

Surgical Management of Lower Extremity Lymphedema: A Comprehensive Review.

Ciudad P, Sabbagh MD, Agko M, Huang TCT, Manrique OJ, L CR, Reynaga C, Delgado R, Maruccia M, Chen HC.

Indian J Plast Surg. 2019 Jan;52(1):81-92.

Abstract

Lymphedema refers to the accumulation of protein-rich fluid in the interstitial spaces. This can occur secondary to congenital malformation of the lymphatic channels or nodes or as a result of an insult that damages appropriately formed channels and nodes. Stagnant, protein-rich lymph initiates an inflammatory response that leads to adipocyte proliferation, fibrous tissue deposition, and increased susceptibility to infections. The end result is permanent disfigurement and dermal changes. Early and accurate diagnosis is essential, since lymphedema is a chronic and progressive problem. When lymphedema affects the lower extremity, it is important to manage it in a way that preserves function and mobility. Early diagnosis also allows for a proactive rather than reactive approach to treatment and utilization of novel physiologic procedures, such as lymphovenous anastomosis and vascularized lymph node transfer. Such interventions slow down disease progression and reduce morbidity by allowing the surgeon to salvage the remaining functional lymphatic channels. When physiologic procedures fail or when faced with a delayed presentation, the addition of excisional procedures can provide a more comprehensive treatment of this debilitating disease. The aim of this article is to review the most current concepts in the surgical management of lower extremity lymphedema.

Clinical Outcomes in Early Breast Cancer With a High 21-Gene Recurrence Score of 26 to 100 Assigned to Adjuvant Chemotherapy Plus Endocrine Therapy: A Secondary Analysis of the TAILORx Randomized Clinical Trial.

Sparano JA, Gray RJ, Makower DF, Albain KS, Saphner TJ, Badve SS, Wagner LI, Kaklamani VG, Keane MM, Gomez HL, et al.

JAMA Oncol. 2019 Sep 30.

Abstract

IMPORTANCE: A high 21-gene recurrence score (RS) by breast cancer assay is prognostic for distant recurrence of early breast cancer after local therapy and endocrine therapy alone, and for chemotherapy benefit. OBJECTIVE: To describe clinical outcomes for women with a high RS who received adjuvant chemotherapy plus endocrine therapy in the TAILORx trial, a population expected to have a high distant recurrence rate with endocrine therapy alone. DESIGN, SETTING, AND PARTICIPANTS: In this secondary analysis of data from a multicenter randomized clinical trial, 1389 women with hormone receptor-positive, ERBB2-negative, axillary node-negative breast cancer, and a high RS of 26 to 100 were prospectively assigned to receive adjuvant chemotherapy in addition to endocrine therapy. The analysis was conducted on on May 12, 2019. INTERVENTIONS: The adjuvant chemotherapy regimen was selected by the treating physician. MAIN OUTCOMES AND MEASURES: Freedom from recurrence of breast cancer at a distant site, and freedom from recurrence, second primary cancer, and death (also known as invasive disease-free survival [IDFS]). RESULTS: Among the 9719 eligible women, with a mean age of 56 years (range 23-75 years), 1389 (14%) had a recurrence score of 26 to 100, of whom 598 (42%) had an RS of 26 to 30 and 791 (58%) had an RS of 31 to 100. The most common chemotherapy regimens included docetaxel/cyclophosphamide in 589 (42%), an anthracycline without a taxane in 334 (24%), an anthracycline and taxane in 244 (18%), cyclophosphamide/methotrexate/5-fluorouracil in 52 (4%), other regimens in 81 (6%), and no chemotherapy in 89 (6%). At 5 years, the estimated rate of freedom from recurrence of breast cancer at a distant site was 93.0% (standard error [SE], 0.8%), freedom of recurrence of breast cancer at a distant and/or local regional site 91.0% (SE, 0.8%), IDFS 87.6% (SE, 1.0%), and overall survival 95.9% (SE, 0.6%). CONCLUSIONS AND RELEVANCE: The estimated rate of freedom from recurrence of breast cancer at a distant site in women with an RS of 26 to 100 treated largely with taxane and/or anthracycline-containing adjuvant chemotherapy regimens plus endocrine therapy in the prospective TAILORx trial was 93% at 5 years, an outcome better than expected with endocrine therapy alone in this population.

Absolute Improvements in Freedom From Distant Recurrence to Tailor Adjuvant Endocrine Therapies for Premenopausal Women: Results From TEXT and SOFT.

Pagani O, Francis PA, Fleming GF, Walley BA, Viale G, Colleoni M, Láng I, Gómez HL, Tondini C, Pinotti G, Di Leo A, Coates AS, Goldhirsch A, Gelber RD, Regan MM; SOFT and TEXT Investigators and International Breast Cancer Study Group.

J Clin Oncol. 2019 Oct 16:JCO1801967.

Abstract

PURPOSE: The Tamoxifen and Exemestane Trial (TEXT)/Suppression of Ovarian Function Trial (SOFT) showed superior outcomes for premenopausal women with hormone receptor (HR)-positive breast cancer treated with adjuvant exemestane plus ovarian function suppression (OFS) or tamoxifen plus OFS versus tamoxifen alone. We previously reported the magnitude of absolute improvements in freedom from any recurrence across a continuous, composite measure of recurrence risk to tailor decision making. With longer follow-up, we now focus on distant recurrence. METHODS: The TEXT/SOFT HR-positive/human epidermal growth factor receptor 2 (HER2)-negative analysis population included 4,891 women stratified by predetermined chemotherapy use. Kaplan-Meier estimates of 8-year freedom from distant recurrence were analyzed using subpopulation treatment effect pattern plot (STEPP) methodology across subpopulations defined by the continuous composite measure of recurrence risk. For each patient, the composite risk value was obtained from a Cox model that incorporated age; nodal status; tumor size; grade; and estrogen receptor, progesterone receptor, and Ki-67 labeling index expression levels. RESULTS: The overall rate of 8-year freedom from distant recurrence was 91.1% and ranged from approximately 100% to 63% across lowest to highest composite risks. TEXT patients who received chemotherapy had an average absolute improvement with exemestane plus OFS versus tamoxifen plus OFS of 5.1%, and STEPP analysis showed improvements from less than 1% to more than 15% from lowest to highest composite risks. SOFT patients who remained premenopausal after chemotherapy had an average 5.2% absolute improvement with exemestane plus OFS versus tamoxifen and reached 10% across composite risks; for tamoxifen plus OFS versus tamoxifen, the maximum improvement was approximately 3.5%. Women who did not receive chemotherapy had a more than 97% rate of 8-year freedom from distant recurrence, and improvements with exemestane plus OFS ranged from 1% to 4%. CONCLUSION: Premenopausal women with HR-positive/HER2-negative breast cancer and high recurrence risk, as defined by clinicopathologic characteristics, may experience a 10% to 15% absolute improvement in 8-year freedom from distant recurrence with exemestane plus OFS versus tamoxifen plus OFS or tamoxifen alone. The potential benefit of escalating endocrine therapy versus tamoxifen alone is minimal for those at low recurrence risk.

Breast-conserving surgery vs. total mastectomy in patients with triple negative breast cancer in early stages: a propensity score analysis.

De-la-Cruz-Ku G, Valcarcel B, Morante Z, Möller MG, Lizandro S, Rebaza LP, Enriquez D, Luque R, Luján-Peche MG, Eyzaguirre-Sandoval ME, Saavedra A, Razuri C, Pinto JA, Fuentes HA, Neciosup SP, Gomez HL.

Breast Dis. 2019 Dec 23.

Abstract

BACKGROUND: Breast-conserving surgery (BCS) as an alternative to total mastectomy (TM) in patients with early-stage triple-negative breast cancer (TNBC) is not widely spread. OBJECTIVE: We aimed to compare the overall survival (OS) and disease-free survival (DFS) between both surgical approaches in early-stage TNBC patients at 10 years. METHODS: We conducted a retrospective cohort study in TNBC female patients with stage I-IIa, treated at a single-center during the period of 2000-2014. We estimated and compared the survival rates with the Kaplan Meier and Long-rank test. Propensity scores were calculated with the generalized boosted regression model and were used in the multivariate Cox regression analysis with the covariate adjustment method. RESULTS: We included 288 patients, 111 in the BCS vs. 177 in the TM group. The median follow-up was 102 months. Moreover, the patients in the BCS group had superior OS (85% vs. 81%, p = 0.56) and DFS (83% vs. 80%, p = 0.42) at 10 years. In the multivariate Cox analysis, BCS decreased the mortality risk (HR: 0.79, 95% CI: 0.37-1.67, p = 0.538), and the locoregional or distant recurrence risk (HR: 0.67, 95% CI: 0.32-1.41, p = 0.294), albeit with no statistical significance. CONCLUSION: BCS is a safe alternative to TM in Latin-American patients with early-stage TNBC.

Phase III Trial of Adjuvant Capecitabine After Standard Neo-/Adjuvant Chemotherapy in Patients With Early Triple-Negative Breast Cancer (GEICAM/2003-11_CIBOMA/2004-01).

Lluch A, Barrios CH, Torrecillas L, Ruiz-Borrego M, Bines J, Segalla J, Guerrero-Zotano Á, García-Sáenz JA, Torres R, de la Haba J, García-Martínez E, Gómez HL, Llombart A, Bofill JS, Baena-Cañada JM, Barnadas A, Calvo L, Pérez-Michel L, Ramos M, Fernández I, Rodríguez-Lescure Á, Cárdenas J, Vinholes J, Martínez de Dueñas E, Godes MJ, Seguí MA, Antón A, López-Álvarez P, Moncayo J, Amorim G, Villar E, Reyes S, Sampaio C, Cardemil B, Escudero MJ, Bezares S, Carrasco E, Martín M; GEICAM Spanish Breast Cancer Group; CIBOMA (Iberoamerican Coalition for Research in Breast Oncology); and LACOG (Latin American Cooperative Oncology Group).

J Clin Oncol. 2019 Dec 5:JCO1900904.

Abstract

PURPOSE: Operable triple-negative breast cancers (TNBCs) have a higher risk of relapse than non-TNBCs with standard therapy. The GEICAM/2003-11_CIBOMA/2004-01 trial explored extended adjuvant capecitabine after completion of standard chemotherapy in patients with early TNBC. PATIENTS AND METHODS: Eligible patients were those with operable, node-positive-or node negative with tumor 1 cm or greater-TNBC, with prior anthracycline- and/or taxane-containing chemotherapy. After central confirmation of TNBC status by immunohistochemistry, patients were randomly assigned to either capecitabine or observation. Stratification factors included institution, prior taxane-based therapy, involved axillary lymph nodes, and centrally determined phenotype (basal v nonbasal, according to cytokeratins 5/6 and/or epidermal growth factor receptor positivity by immunohistochemistry). The primary objective was to compare disease-free survival (DFS) between both arms. RESULTS: Eight hundred seventy-six patients were randomly assigned to capecitabine (n = 448) or observation (n = 428). Median age was 49 years, 55.9% were lymph node negative, 73.9% had a basal phenotype, and 67.5% received previous anthracyclines plus taxanes. Median length of follow-up was 7.3 years. DFS was not significantly prolonged with capecitabine versus observation [hazard ratio (HR), 0.82; 95% CI, 0.63 to 1.06; P = .136]. In a preplanned subgroup analysis, nonbasal patients seemed to derive benefit from the addition of capecitabine with a DFS HR of 0.53 versus 0.94 in those with basal phenotype (interaction test P = .0694) and an HR for overall survival of 0.42 versus 1.23 in basal phenotype (interaction test P = .0052). Tolerance of capecitabine was as expected, with 75.2% of patients completing the planned 8 cycles. CONCLUSION: This study failed to show a statistically significant increase in DFS by adding extended capecitabine to standard chemotherapy in patients with early TNBC. In a preplanned subset analysis, patients with nonbasal phenotype seemed to obtain benefit with capecitabine, although this will require additional validation.

Multigene assays in early breast cancer: Insights from recent phase 3 studies.

Markopoulos C, Hyams DM, Gomez HL, Harries M, Nakamura S, Traina T, Katz A.

Eur J Surg Oncol. 2019 Oct 15.

Abstract

Multigene assays (MGAs) guide treatment in early-stage breast cancer (ESBC) enabling selective and effective use of adjuvant chemotherapy (CT). Support for all MGAs had previously been derived from retrospectively-analyzed, prospective studies. Only 2 ESBC MGAs, the 70-gene signature (MammaPrint®) and the 21-gene Recurrence Score (RS) assay (Oncotype DX®), are now supported by entirely prospective randomized phase 3 trials. These studies varied in their primary objectives, design, and eligibility. The MINDACT study provided the first level 1 evidence for the 70-gene signature, identifying a prognostic capability irrespective of lymph node (LN) or hormone receptor (HR) status. However, the study did not support predictive value for the assay regarding adjuvant CT utility. The second prospective study, WSG-PlanB, confirmed the prognostic value of the 21-gene RS assay in HR-positive tumors with RS ≤ 11. A 5-year disease free survival (DFS) of 94% was identified in this group when treated with endocrine therapy (ET) alone regardless of N0 or N1 nodal status. The final new prospective study, TAILORx, confirmed the prognostic value of the 21-gene assay in N0 HR-positive disease, demonstrating a lack of CT benefit in patients with midrange RS. The information from these phase 3 studies confirms that MGAs are not interchangeable and that each provides different information for differing patient populations. Prognosis-only is supported for the 70-gene signature while both prognosis and the predictive value of CT are provided by the 21-gene assay. This review assesses and contrasts these phase 3 studies in the context of target populations and clinical utility.