

embargo, quedan todavía algunas incógnitas por develar en relación con el estudio de su estado de salud; el papel de la condición física es una de ellas. La CFS parece ser un marcador predictivo válido de riesgo de enfermedad cardiovascular en la juventud<sup>4</sup> y altos niveles de CFS se han relacionado con una mejor salud en personas con DI.<sup>5</sup> No obstante, existe evidencia limitada sobre el nivel CFS de jóvenes con DI en España y, en parte, podría ser debido a la escasez de pruebas desarrolladas específicamente para esta población. Esta circunstancia aconsejó realizar un estudio para valorar el nivel de CFS de jóvenes españoles con DI y analizar su posible asociación con RCVI.

El estudio midió peso, talla, perímetro de cintura (PC), presión arterial y frecuencia cardíaca en reposo a 29 individuos (15 mujeres y 14 hombres) con edad media de 19.4 años, de los cuales 20.7% eran jóvenes con síndrome de Down (SD). Se calculó RCVI a partir de índice masa corporal (IMC) y PC. La CFS se valoró mediante 11 pruebas siguiendo el protocolo estandarizado de la batería "Brockport Physical Fitness Test" para jóvenes con DI.<sup>6</sup> Los individuos con IMC correspondiente a sobrepeso (25.0–29.9 kg/m<sup>2</sup>) y obesidad (≥30.0 kg/m<sup>2</sup>) y

hombres y mujeres con valores de PC >102 y >88 cm, respectivamente se incluyeron en el grupo de RCVI. Asimismo, la muestra se dividió en dos grupos en función del nivel de DI en leve y moderada, según criterios de consenso.

Los resultados obtenidos mostraron que el nivel de DI no pareció una variable que afectara de manera significativa al estado de CFS de la muestra, a excepción de la flexibilidad (cuadro I). Sin embargo, pertenecer al grupo de DI moderada se asoció con un mayor riesgo de enfermedad cardiovascular ( $p=0.042$ ). Respecto a grupos por riesgo cardiovascular, no se encontraron diferencias significativas en relación con puntuación en CFS. El valor de IMC tampoco mostró correlación con las puntuaciones de CFS, con la excepción lógica de la variable composición corporal. El principal hallazgo de nuestro estudio fue que el grado de DI parece tener influencia sobre el RCVI pero no así sobre la CFS. A nuestro entender, éste es el primer estudio que ha evaluado CFS y RCVI conjuntamente en una muestra de jóvenes con DI, incluidos sujetos con SD. Por lo tanto, los datos obtenidos podrían ser de interés para el futuro desarrollo de las estrategias

de salud pública dirigidas a este colectivo. La falta de estudios similares ha limitado las oportunidades de comparación y discusión de nuestros resultados.

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**Cuadro I**  
**PUNTUACIÓN EN CONDICIÓN FÍSICA SALUDABLE EN FUNCIÓN DEL NIVEL DE DISCAPACIDAD INTELECTUAL**

| Variable                 | Todos (N=29)<br>X ± SD | DI ligera (n=15)<br>X ± SD | DI moderada (n=14)<br>X ± SD | p value | T student (IC95%)     |
|--------------------------|------------------------|----------------------------|------------------------------|---------|-----------------------|
| STCSF <sub>(mm)</sub>    | 39.65 ± 14.95          | 36.49 ± 15.91              | 43.05 ± 13.60                | 0.245   | -6.55(-17.87 to 4.75) |
| TAMT <sub>(min)</sub>    | 5.25 ± 6.84            | 5.43 ± 7.19                | 5.07 ± 6.71                  | 0.890   | 0.36(-4.94 to 4.75)   |
| TLT <sub>(cm)</sub>      | 25.91 ± 5.78           | 26.77 ± 5.02               | 25.00 ± 6.58                 | 0.421   | 1.76(-2.67 to 6.20)   |
| MCUT <sub>(rep)</sub>    | 4.31 ± 4.36            | 4.80 ± 5.33                | 3.79 ± 3.14                  | 0.542   | 1.01(-2.35 to 4.38)   |
| EAHT <sub>(sec)</sub>    | 10.23 ± 18.96          | 13.12 ± 23.46              | 7.15 ± 12.74                 | 0.407   | 5.97(-8.56 to 20.50)  |
| DGST <sub>(kg/cm2)</sub> | 15.31 ± 9.91           | 15.87 ± 10.81              | 14.71 ± 9.23                 | 0.760   | 1.15(-6.53 to 8.84)   |
| BSSRTLF <sub>(cm)</sub>  | 8.05 ± 8.31            | 4.77 ± 5.44                | 11.57 ± 9.55                 | 0.025*  | 2.86(-12.67 to 0.93)  |
| BSSRTRF <sub>(cm)</sub>  | 7.56 ± 7.83            | 4.53 ± 4.93                | 10.82 ± 9.17                 | 0.028*  | 2.70(-11.84 to -0.73) |

Composición Corporal (STCSF); test de función aeróbica (TAMT); test de fuerza de extensión y flexibilidad de tronco (TLT); test de fuerza-resistencia abdominal (MCUT); test de fuerza de miembros superiores (EAHT),(DGST); flexibilidad (BSSRTLF), (BSSRTRF)

\* 0.05, nivel de significancia

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## Regarding articles about Cali Cancer Registry I

Dear editor: With great interest we read the series of papers produced by the population-based cancer registry of Cali in Colombia on the situation in breast, colorectal and prostate cancer in this country.<sup>1-3</sup>

The Cali Cancer Registry has been of great value for cancer information and resource planning in Colombia for more than 50 years now. Besides providing valuable

information on cancer incidence in an unbiased population, it has relatively recently also began to provide estimates of cancer survival on a population-basis. This is extremely important as knowing the prognosis of cancer patients, particularly in different population groups, gives us important information on the state of cancer diagnosis and treatment in a population, as it is influenced by stage at diagnosis (in its turn potentially influenced by early detection and timely access to healthcare facilities) and access to and quality of care.

However, as always, the survival statistics presented in the previously mentioned papers should, in our opinion, be interpreted with caution, particularly when comparing two different time periods. In all three referenced manuscripts, the 1, 3 and 5 year survival is reported for the period 1995-2004, with a follow-up period until December 31<sup>st</sup>, 2006 for the papers on breast and colorectal cancer (for the prostate cancer paper the end of follow-up is not described). Although it is unclear why the follow-up was not extended to a later period as crosses were made with the mortality databases until 2010 and the SISBEN database of 2008, this end of follow-up until 2006 already means that for part of the population included in the survival analyses, 5-year survival information is not available, since follow-up for a person diagnosed in 2004 could have maximally been 3 years. Therefore, 5 year survival estimates are based on persons diagnosed longer ago, which is important to mention.

More importantly, on colorectal cancer, the authors divided the observation period into two (1995-1999 and 2000-2004) and conclude that the 5-year relative survival improved significantly in men and women from Cali.<sup>1</sup> Indeed, the estimates show statistically significant improvements, for example from 28 to 56% in males under 50 years of age. This is a doubling in survival time, and if it were

true, would be very good news. However, these calculations are based on one cohort with complete follow-up (the 1995-1999 cohort) and one cohort in which only the patients diagnosed in 2000 and 2001 have reached 5 years follow-up. Patients diagnosed in the subsequent years were presumably censored at December 31<sup>st</sup> 2006. Incompleteness of follow-up is known to generally cause inflated survival estimates,<sup>4</sup> and this artificial fact may be causing part of the very large increases in survival. This seems likely to have happened, as we see smaller, although still large improvements occurring for the 1 year relative survival rates, and intermediate improvements in the 3 year survival rates presented in this paper. Indeed, the 2000-2004 cohort does not have complete follow-up at three years either. As the authors do not report to have used period-based relative survival models,<sup>5</sup> we presume the presented results are the traditional cohort-based ones and therefore the second one is incomplete in follow-up.

Of course, real increases in survival may have occurred, but having such a large increase within just a few years on a population-level should be carefully evaluated. Changes in follow-up practices, coding, etc., may also be underlying such changes.

In addition there is an error in the multivariate survival analysis methodology causing difficulty in its interpretation: Cox proportional hazards models were constructed to perform analyses investigating the effects of age, stage, socioeconomic status and period of diagnosis. The most important underlying assumption of Cox proportional hazards modeling is that the hazards are proportional.<sup>6</sup> The authors performed a statistical test to evaluate if this assumption applied to their data, and this test clearly showed that in certain subgroups, the proportional hazards assumption was violated. Whereas this impedes continuing with conventional Cox proportional

hazards modeling and calls for performing either stratified analyses or a time-dependent exposure models,<sup>6</sup> the authors ignored the violation and presented their results without consideration on it. Depending on the exact underlying data, this may result in invalid conclusions and therefore we feel that the results presented on the hazards of dying for the covariates should not be interpreted at all.

We consider the point highly relevant, as the idea of performing multivariate analyses on survival of cancer in Colombia in a population-based setting is of major interest, particularly referring to socioeconomic differences.

We hope that the registry will have the opportunity to clarify some of the points we have presented as well as to improve statistical analysis in future studies.

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