Letter to the Editor

Inferior median sternotomy

José M. Bernal*, José M. Rabasa, J. Aurelio Sarralde, Carlos Morales, José M. Revuelta

Department of Cardiovascular Surgery, Hospital Universitario Valdecilla, E-39008 Santander, Spain

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We have read with interest the report of Legarra et al. [1] regarding the use of an inferior median sternotomy incision in patients with a tracheostomy. We have been able to take advantage of their technique’s description to solve a legal problem. A case of death by hanging was considered adequate for multorgan transplantation including the heart. In Spain, donation of organs for transplantation is extremely favored by law and we have the highest index of organ donations and transplants per inhabitant in the world. The donor’s juridical characteristics obliged to preserve the integrity of the cervical region and upper half of the thorax as an essential requirement for the forensic anatomical study in cases of death by hanging. The idea recently described by our colleagues of Pamplona [1] allowed us to use the heart for cardiac transplantation. An inferior median sternotomy incision was performed from the xiphoid process to the third intercostal space with a ‘T’ transversal extension to both sides. Both internal mammary arteries were not divided. After incision of the pericardium, the heart was exposed in a very similar manner to the use of a standard median sternotomy incision, although, access to the pulmonary artery may have been slightly impaired. The cannula for cardioplegia was inserted into the ascending aorta and the aorta was transected just below the origin of the braquicephalic trunk without difficulty. In our opinion, this operative approach provides a surgical field similar to that obtained via the bilateral submammary incision and complete median sternotomy, previously reported [2], and in the present time of minimally invasive cardiac operations, access to the right and left atria and to the aortic valve seems adequate and cosmetically, the incision is more suitable than others involving the upper half of the sternum. In this particular case, we were not able to assess facility and stability of closure of the inferior T sternotomy incision. We believe that this approach can be useful in selected cases or when required for the cosmetic appearance of the scar.

References


* Corresponding author. Tel.: +34-942-202-536; fax: +34-942-202-655; e-mail: ccabmj@humv.es