

ABSTRACT SUBMISSION FORM ESSR MAY 6-9, 1990 BERLIN, GDR
DEADLINE JAN 10, 1990

PRESENTATION ☐ Oral ☐ Poster ☒ Indifferent ☐ Film
☐ Video ☐ VHS ☐ U-matic ☐ Work in progress

TITLE OF ABSTRACT Regenerative activity of singeneic hepatocytes
inoculated into spleen

AUTHOR(S) V. Portugal, I. García-Alonso, P. Barceló, J. Ortiz,
I. López de Tejada, J. Méndez

INSTITUTION(S) Hospital Basurto # Fac. of Medicina (Univ. of the Basque Country)

MEMBERSHIP ☒ ESSR ☐ SRS ☐ SUS **OR SPONSOR NAME** J. Méndez Martín **CITY** Bilbao (Spain)



REGENERATIVE ACTIVITY OF SINGENEIC HEPATOCYTES INOCULATED INTO SPLEEN

Functional activity of hepatocytes inoculated into spleen has already been assessed. We have designed this work to check the ability of these cells to respond to regenerative stimuli.

Material and methods. Singeneic Fisher rats were used as receptors (200 g) and donors (300 g) of hepatocellular transplantation. Hepatocytes were isolated by continuous perfusion with collagenase 0.5%. Survival rate (94±2%) was assessed by Tripán Blue exclusion test. 20 million hepatocytes suspended in 1 cc of Hank's Solution were inoculated into spleen. 70% hepatectomy has been performed 24 h after inoculation. Daily doses of CsA (20 mg/Kg i.p.) have been administered from the day before transplantation. Four groups of seven animals have been considered: (I) control, (II) 70% hepatectomy, (III) CsA, (IV) CsA + 70% hepatectomy. Animals were sacrificed 48 h. after inoculation and hepatocytes' DNA content was measured by means of a microcytoespectrophotometric method. Mean percentage of regenerating hepatocytes (MPRH) was then assessed.

Results. Hepatic MPRH was: (I) 8.58%, (II) 35.12%, (III) 27.28% and (IV) 23.94%. Splenic MPRH was: (I) 19.23%, (II) 36.39%, (III) 11.59%, (IV) 23.94%. Liver hepatocytes showed a regenerative response similar to control livers': 70% hepatectomy and CsA (both alone or combined) increased hepatocytes' DNA ($p < 0.05$) without significant differences between the three groups. Hepatocytes inoculated into spleen had a DNA content similar to liver hepatocytes'. However in animals subjected to 70% hepatectomy (with or without CsA) splenic hepatocytes' DNA content was greater than control hepatic hepatocytes' ($p < 0.05$).

Conclusions. Hepatocytes inoculated into spleen responded to 70% hepatectomy with a regenerative activity similar to hepatic hepatocytes'. Nevertheless they did not respond to CsA's regenerative stimulus.

Topic N°
According to topic list
in final announcement.



01 GS
02 LP
03 SO
04 TS
05 VS
06 CS
07 UR
08 OT
09 MS
10 BM
11 SP
12 SH
13 AN
14 CA

MAILING ADDRESS

Vicente Portugal Porras 944.41.88.00 (Ext. 367)
SURNAME FIRST NAME(S) PHONE
Servicio de Cirugía General "B"; Hospital de Basurto
INSTITUTION
Av. Montevideo s/n BILBAO 48013 SPAIN
STREET CITY POSTAL CODE COUNTRY

INSTRUCTIONS:

1. Enter name of author(s), institution and abstract title in the appropriate space
2. Your entire abstract, INCLUDING TITLE (in capitals). NO NAME of author or institution must be typed in the outlined box
3. Abstracts must be factual, include the specific objective of the study, a brief statement of methods, summary of results and conclusions
4. State which type of presentation you prefer. Mark one only or INDIFFERENT
5. Submit original copy of the abstract typed (electric, 10 pitch Courier) on the Abstract Submission Form with 6 copies on which author(s) name, affiliation, etc., are blanked out
6. Graphs or tables are not allowed.

MAIL THIS FORM, TOGETHER WITH 6 COPIES BEFORE JAN 10, 1990
TO ESSR-CONGRESS SECRETARIAT, P.O. BOX 131, BERLIN, GDR-1136



ESSR