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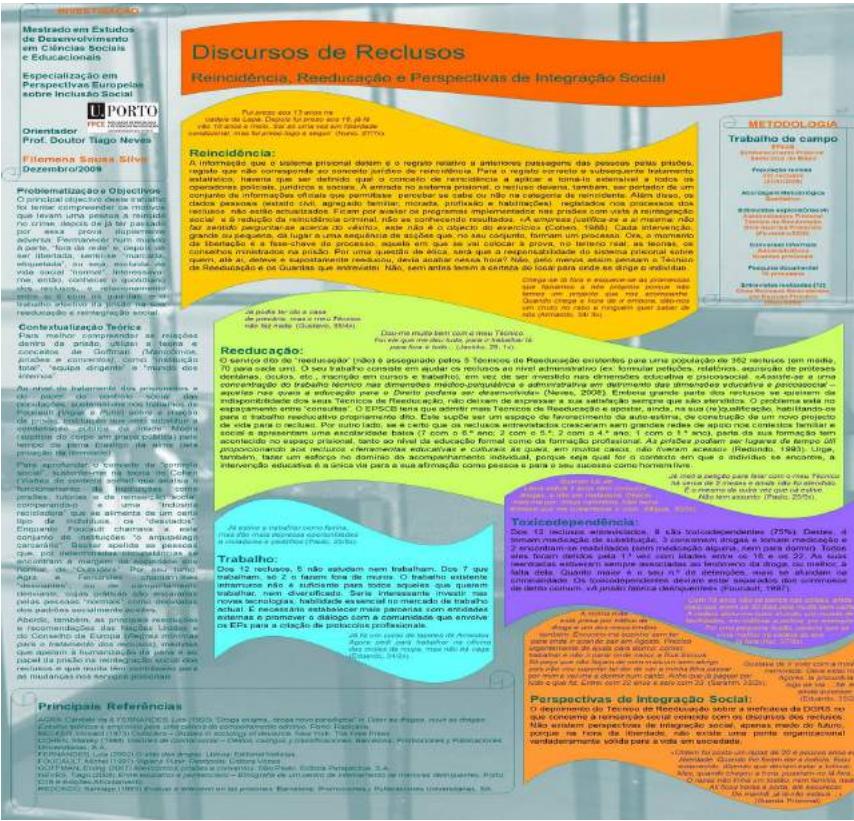


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Erros e acertos ao montar um Pôster

Prof. Alfred Sholl

PÔSTERES NÃO RECOMENDÁVEIS



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PROJECT ROUNDS FOR LIFE
PREVENTION WITHOUT DISCRIMINATION
JOORG Gijsbers, KHA McElroy, M. Wertheimer, R. Barbosa, M. Faria L.
CAMPUS PLANTATION/UNIVERSITY RESEARCH FOUNDATION, BRAZIL

In the beginning of the AIDS epidemic the homosexuals were stigmatized as the only responsible persons by the transmission of the disease. Conscious of the risks that the unprotected sex offers for the contamination for HIV, the male homosexuals started to adopt preventive behavior. Since 1990, with the coming of the anti-AIDS cocktail X was verified through epidemy data a negligence in the preventive behavior. With that, starting from this year the Ronda Pela Vida (Rounds for Life) Project of developing an awareness and prevention work about Sexually Transmitted Diseases/AIDS with male homosexuals in places of gay concentration, such as Night-clubs, Bars and Saunas of the municipal district of Niterói.

In face of the verified vulnerability of the male homosexual population to HIV, the Project "Ronda Pela Vida" started to develop the following activities:

- Weekly interventions in the gay public's concentration places;
- Production and distribution of informative material;
- Organization of cultural educational events;
- Distribution of condoms;
- Production of Posters with awareness messages.

Conclusion: data referring to the year of 1997:
12.000 reached male homosexuals;
30.000 distributed condoms;
10.000 copies of produced and distributed folders;
125 intervention visits;
3 festival events carried out in the gay Night-clubs and;
3 participations in Seminars with the theme "Homosexuality X AIDS" for modernization of the team and institutional exchange.

After twelve months through observations and informal interviews we confirmed that the systematic work of prevention to STD/AIDS with the male homosexual population brings positive results along. The Ronda Project won this public's trust and still adhesion of the Drag Queens, that started to act as multipliers of information on STD/AIDS in their performances.

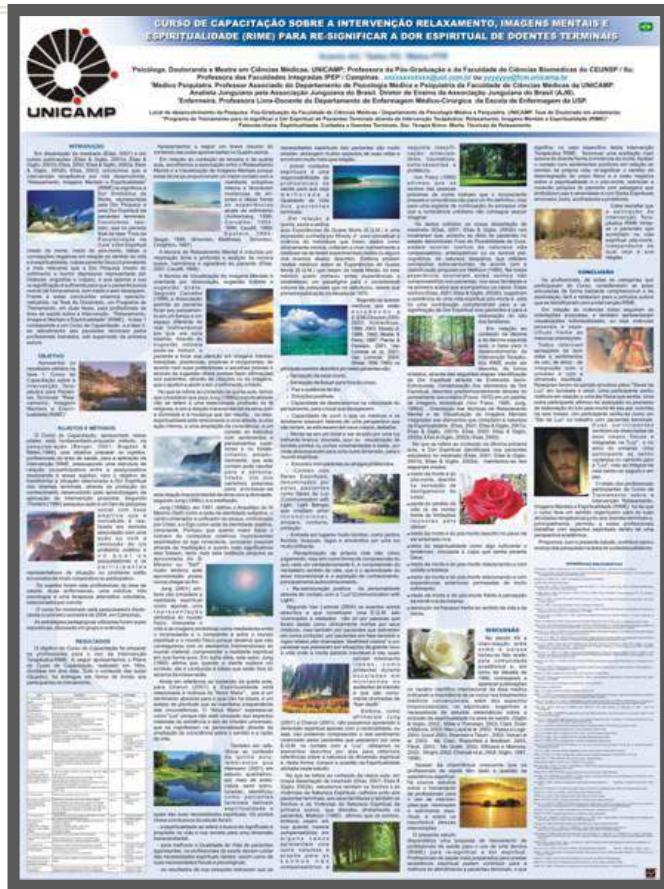
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Fibromyalgia Type I and Type II : Profiling distinct subgroups using the Fibromyalgia Impact Questionnaire (FIQ)

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Introduction

Fibromyalgia (FM) is a chronic pain syndrome most frequently present in women. It is characterized by chronic widespread pain, sensitivity at tender points, and is usually associated with sleep disturbances, fatigue, visceral pain and depression.

The complex clinical profile observed among Fibromyalgia patients indicates that Fibromyalgia is not a homogeneous disorder. Variability in the intensity of FM related symptoms, including differences in psychological functioning (Turk et al., 1998; Gioceli et al., 2003), altered cardiovascular reactivity (Nachtigal et al., 2001), and disturbed pain perception (Kraen et al., 2000; Hung et al., 2001; Gioceli et al., 2008) clearly demonstrates this heterogeneity.

Objective

We used the Fibromyalgia Impact Questionnaire (FIQ) to identify subtypes of FM patients. The FIQ is an ideal questionnaire to use for cluster formation because it is quickly administered and easily assesses a large number of different FM related clinical characteristics.

In this study, we also assessed how the different FM subgroups differed in response to pain, psychological functioning and demographic profile. Our objective, therefore, was to describe the factors that might be operative in predicting symptom differences in FM.

Methods

51 one women diagnosed with FM participated in this study.

FM subgroups were created by applying a hierarchical cluster analysis on selected items of the FIQ:

Classifications variables: pain, fatigue, morning tiredness, stiffness, anxiety and depression.

We also tested for group differences (MANOVA):

(1) Experimental pain: pressure pain threshold at tender points, the strength of descending pain inhibition, and pain intensity ratings recorded during the arm immersion test.

(2) Psychosocial functioning: mean catastrophizing on the PCS pain related, interference on daily living, perception of life control, support from significant others, the Mental Component Summary and the Physical Component Summary on the SF-36.

(3) Demographic characteristics: age, years since symptom onset, place with FM diagnosis, work status, and presence or absence of an identifiable trigger event.

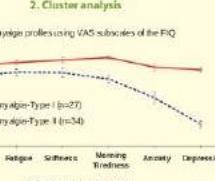
Results

1. Descriptive analysis

Participant Characteristics

Demographic Data and Questionnaire Score	Mean(S.D.)
Age (yr)	49.7(7.3)
Years with symptoms/chronic pain	12.6(8.7)
Years with fibromyalgia diagnosis	6.0(5.8)
Reported subjects working full or part-time	46%
Reported subjects living with a partner	58%
Reported subjects with university degree	32%
Reported subjects with high school	34%
Anxiety: preface pain measured at tender points	0.6(0.5)
Endogenous pain inhibition (in percentage)	17.7(8.7)

2. Cluster analysis



Cluster Characteristics

FIQ subscale	Cluster I			Cluster II		
	Mean (S.D.)	Mean (S.D.)	Loadings	Mean (S.D.)	Mean (S.D.)	Loadings
Pain	6.05 (2.08)	7.62 (1.40)	0.24	3.82	5.97	0.07
Fatigue	6.99 (2.59)	7.92 (1.25)	0.37	2.30	4.42	0.07
Stiffness	6.86 (2.48)	8.16 (1.53)	0.62	0.12	0.89	0.07
Anxiety	6.2 (2.9)	6.25 (1.89)	0.81	1.72	2.98	0.07
MCS	36.30 (12.59)	30.6 (11.28)	0.85	0.00	0.00	0.05
Mental Component Summary (SF-36)	30.6 (11.28)	4.58 (2.2)	7.47 (1.88)	0.85	0.00	0.05
Physical Component Summary (SF-36)	30.5 (5.79)	2.67 (1.28)	7.22 (1.27)	0.84	0.00	0.12
Cluster III				>1.07	>35.05	

*In boldface indicate the variables that most distinguish the clusters (with the highest loading).

Discriminant function was significant ($\chi^2 = 86.96$, $p < 0.001$)

3. Multivariate analysis of variance (MANOVA)

Anova Analysis of Demographic Data	Multivariate Analysis of Experimental Pain			Multivariate Analysis of Psychosocial Data			
	FM Type I	FM Type II	p-value	FM Type I	FM Type II	p-value	
Variables	Mean (S.D.)	Mean (S.D.)	p-value	Variables	Mean (S.D.)	Mean (S.D.)	p-value
Age (yr)	51.07 (7.3)	49.11 (8.7)	0.031	Pressure pain	6.05 (2.08)	7.62 (1.40)	0.24
Years of experience	12.27 (8.4)	12.6 (8.7)	0.818	Descending pain	0.6 (0.5)	0.6 (0.5)	0.62
Anxiety				Individual			0.002
Years with Fibromyalgia	5.62 (5.8)	5.4 (5.8)	0.877	Depression	6.2 (2.9)	6.25 (1.89)	0.81
Depression				Individual			0.002
Age (yr)	50.9 (7.3)	50.3 (7.0)	0.836	Depression	6.2 (2.9)	6.25 (1.89)	0.81
Years with FM	5.75	5.75	0.812	Depression	6.2 (2.9)	6.25 (1.89)	0.81

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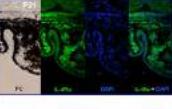
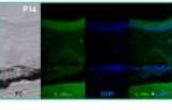
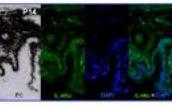
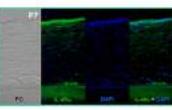
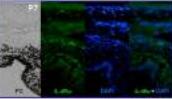
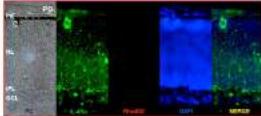
IMMUNOLOCALIZATION OF THE INTERLEUKIN-4 RECEPTOR ALPHA CHAIN IN OCULAR TISSUES DURING POSTNATAL STAGES

Silva, A. G. L. S. da, Linden, R. e Sholl-Franco, A.

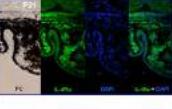
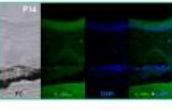
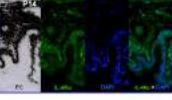
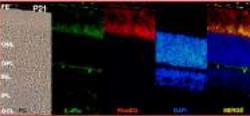
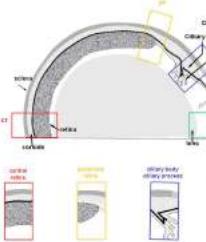
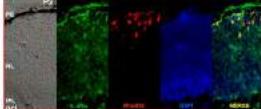
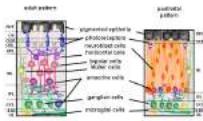
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INTRODUCTION

The interleukin-4 receptor alpha chain (IL-4R α) is only one of the several cytokine-binding polypeptides that can bind to the IL-4R β chain. The IL-4R α chain binds to IL-4 with high affinity, leading to downstream signaling through Jak-3 and STAT-6. There are two types of IL-4 receptors. In nonhematopoietic cells, the type II receptor consists of the IL-4R α chain associated with the IL-13R α chain instead of IL-13R β that forms the type I receptor. The aim of this study was to investigate whether the IL-4R α chain is expressed in the development of rodent ocular tissues, in particular in the neural retina.



POSTNATAL RETINA DEVELOPMENT AND STRUCTURE

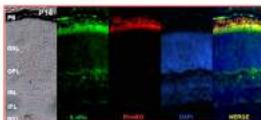


MATERIALS AND METHODS



ABSTRACT

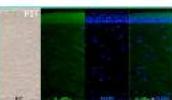
RESUMO: No presente estudo imunofluorescência foi utilizada para determinar a expressão da cadeia alfa do receptor da interleucina-4 (IL-4R α) em tecidos oculares de ratos durante o desenvolvimento pós-natal. A expressão da IL-4R α pode ser observada no nervo óptico, no epitélio corneano, na retina e no cristalino. A expressão da IL-4R α é observada no nervo óptico e no epitélio corneano em todos os estágios pós-natais. Na retina, a expressão da IL-4R α é observada no epitélio corneano, no nervo óptico, nos neurônios ganglionares, nos amacrinos, nos neurônios da camada nuclear interna e nos neurônios da camada nuclear externa. A expressão da IL-4R α é observada no cristalino em todos os estágios pós-natais. A expressão da IL-4R α é observada no epitélio corneano, no nervo óptico, nos neurônios ganglionares, nos amacrinos, nos neurônios da camada nuclear interna e nos neurônios da camada nuclear externa. A expressão da IL-4R α é observada no cristalino em todos os estágios pós-natais.



CONCLUSION

Our data showed the presence of the interleukin-4 receptor alpha chain in various ocular tissues during postnatal development. Initially, we can observe the presence of the receptor in the optic nerve, corneal epithelium, and lens. At P4 stage it is possible to observe some ganglion cells expressing IL-4R α . At P2 we can observe the expression in the photoreceptor segment, and at P6 we can detect the expression in the ganglion cell segment. Our results show that the expression of IL-4R α is mainly in retina, optic nerve, and lens segments of rod photoreceptor cells, as suggested by the colocalization with rhodopsin.

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• PROBRA-MCTI



PÔSTER RECOMENDÁVEL

SIGNALING PATHWAYS RELATED TO INTERLEUKIN-2 NEUROPROTECTIVE EFFECT UPON RETINAL GANGLION CELLS *IN VITRO*

Alfred Sholl-Franco and Camila Marra

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Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ 21949-900, Brazil. Phone: +55-21-25626562. e-mail: asholl@biof.ufrj.br

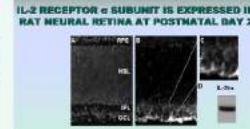
INTRODUCTION

Programmed cell death is a phenomenon associated with both normal development and pathological processes. During development, cell death is often required to achieve tissue homeostasis, whereas during pathological processes, cell death can be either programmed or unprogrammed. In the retina, programmed cell death has been shown to promote RGC degeneration. During the development of the nervous system, proliferation, neurogenesis, differentiation, migration, and apoptosis are tightly coordinated events that result in the formation of specific structures and mechanisms of communication within networks (e.g., neurons and glial cells). Interleukin-2 (IL-2) is a pleiotropic cytokine that acts as an anti-apoptotic agent. IL-2 and its soluble receptor gp130 are expressed in RGC. The molecular mechanism by which IL-2 exerts its protective effect upon RGC is not fully understood.

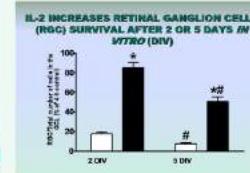
Postnatal Retina Development and Structure



1 **IL-2 RECEPTOR α SUBUNIT IS EXPRESSED IN RAT NEURAL RETINA AT POSTNATAL DAY 2**

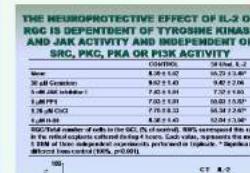


2 **IL-2 INCREASES RETINAL GANGLION CELLS (RGC) SURVIVAL AFTER 2 OR 5 DAYS *IN VITRO* (DIV)**



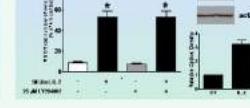
Days in vitro (DIV)	Control (%)	IL-2 (5 U/ml) (%)	IL-2 (50 U/ml) (%)
2 DIV	~10	~85*	~75
5 DIV	~10	~85#	~75

3 **THE NEUROPROTECTIVE EFFECT OF IL-2 ON RGC IS DEPENDENT OF TYROSINE KINASE AND JAK ACTIVITY AND IS INDEPENDENT OF SRC, PKC, PRA OR PI3K ACTIVITY**



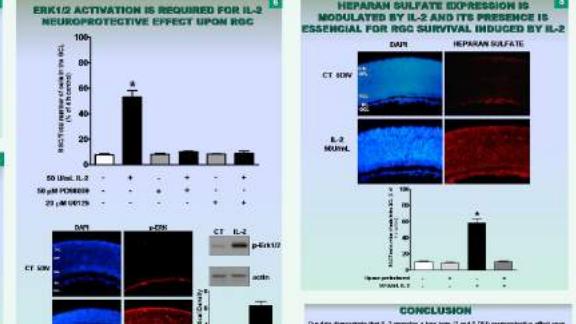
Activity	Control (%)	IL-2 (5 U/ml) (%)	IL-2 (50 U/ml) (%)
JAK	~10	~85*	~75
PI3K	~10	~85*	~75
SRC	~10	~85*	~75
PKC	~10	~85*	~75
PRA	~10	~85*	~75

4 **IL-2 INCREASES BDNF EXPRESSION BUT RGC SURVIVAL IS INDEPENDENT OF BDNF OR PEPTIDES RELEASE IN CULTURE**



Condition	Control (%)	IL-2 (5 U/ml) (%)	IL-2 (50 U/ml) (%)
BDNF	~10	~85*	~75
IL-2	~10	~85*	~75
IL-2 + BDNF	~10	~85*	~75

5 **HEPARAN SULFATE EXPRESSION IS MODULATED BY IL-2 AND ITS PRESENCE IS ESSENTIAL FOR RGC SURVIVAL INDUCED BY IL-2**



Condition	Control (%)	IL-2 (5 U/ml) (%)	IL-2 (50 U/ml) (%)
DAPI	~10	~85*	~75
HS	~10	~85*	~75

6 **CONCLUSION**

Our data demonstrates that IL-2 protects RGC from apoptosis induced by various agents, and this effect is related to tyrosine kinase and JAK activity. The role of heparan sulfate in IL-2-induced RGC survival is also demonstrated.

SUPPORT PROVIDED BY: CNPq, FAPERJ, CNCT, FAPERJ

ABSTRACT

Introdução: Programmed cell death é um fenômeno associado com both normal development and pathological processes. Durante o desenvolvimento, morte celular é muitas vezes necessária para alcançar a homeostase tecidual. No entanto, durante os processos patológicos, a morte celular pode ser tanto programada quanto desprogrammada. Na retina, a morte celular programada contribui para a degeneração das células ganglionares retinianas (RGC). Durante o desenvolvimento do sistema nervoso, a proliferação, a neurogênese, a diferenciação, a migração e a apoptose são eventos estreitamente coordenados que resultam na formação de estruturas específicas e mecanismos de comunicação dentro de redes (por exemplo, neurônios e células gliais).

Metodologia: As células RGC foram isoladas para cultura in vitro e tratadas com IL-2 (5 ou 50 U/ml) ou com óxido nítrico (NO) (100 μM). A sobrevivência das células RGC foi avaliada por coloração com DAPI e contagem de células vivas. A expressão de sinalização de IL-2 foi avaliada por imuno-fluorescência e Western blot. A expressão de heparan sulfato foi avaliada por imuno-fluorescência e Western blot.

Resultados: Os resultados mostraram que 50 U/ml IL-2 tratamento media sobrevida de RGC de 100% em todos os dias. O tratamento com IL-2 (5 U/ml) também aumentou a sobrevida de RGC de 100% em todos os dias. O efeito de IL-2 sobre a sobrevida de RGC é dependente da atividade da tirosina quinase e da JAK, mas independente da atividade de SRC, PKC, PRA ou PI3K. IL-2 aumentou a expressão de BDNF, mas a sobrevida de RGC não depende da liberação de BDNF ou de outros fatores. A expressão de heparan sulfato é modulada por IL-2 e sua presença é essencial para o efeito neuroprotector de IL-2 sobre a sobrevida de RGC.