CHRONIC PSYCHOPATHOLOGIES ASSOCIATED WITH PERSISTENT RICKETTSIE AND/OR SIMILAR GERMS (CHLAMYDIAE)

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# ACTA MEDITERRANEA DI PATOLOGIA INFETTIVA E TROPICALE

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[Psicopatologie croniche associate alla persistenza di Rickettsie elo di germi simili (Chlamydiae).]

### RIASSUNTO

Nel complesso di 60 casi di malattie che vengono chiamate "psichiche" associate a persistenti Rickettsie, abbiamo 55 buoni ed eccellenti risultati, 5 insuccessi, però occorre aspettare la conferma portata dallo scorrere del tempo per molti pazienti.

### SUMMARY

For 60 cases of diseases that are called "Psychic" associated with persistent rickettsiae; we have: 55 good and excellent result, 5 failures, but we still have to wait a confirmation in course of time for many patients.

I would like to begin by describing the framework and setting, the direction and aim of my intervention.

It consists of that of medical practitioner in contact with his patients, who while treating them, records a considerable improvement of the pathological symptoms in a great majority of cases over a variable period.

The somewhat scholastic arguments concerning the value or non-value a serologic reaction, which seems in actual fact to depend on the antigenic quality of the strains used, must be relativised.

In point of fact a serologic reaction assumes full value when it is confronted on the one hand with the symptomatology and on the other hand with the development under treatment and finally with its dynamic aspect which shows in all our cases a significant variation in the antibody titres from one examination to another or over a longer period with intermittent almost constant negativation.

To be sure, we have not tested the therapeutic according to the terms of the modalities in force; but most of our patients have done so for a number of months or years in pathology, even going back decades, and have tried multiple therapeutics without success and have thus in my opinion exhausted every "Placebo" effect possible.

Our results are at last beginning to be cross-checked and confirmed by French doctors whom we have trained.

The symptoms I have observed were in part dealt with previously by medical practitioners in the 1960's who had already opened the gateway of rickettsial psychopathology.

To these foundations, I have added my own stone to the edifice.

In a like manner it also rests with the clinicist with his sense of observation to put forth sufficiently convincing and convergent arguments in order that the university authorities, with the means they have at their disposal, provide absolute proof of what we are proposing.

It would be interesting to verify if a certain number of our seropositive cases are also seropositive vis-à-vis the Borrelioses, notably the Borrelia Burgdorferi, whose epidemiology is close, which is responsible for the disease Lyme

whose delayed chronic manifestations can be neuropsychic.

I give thanks here to Doctor-General Le Gac (Médicin des Hôpitaux), who demonstrated the considerable role of rickettsiae in the origin of multiple schlerosis:

Pofessor Jadin of the Institute of Tropical Medicine of Anvers who trained me in the field of rickettsiae;

Professor Henri Baruk of the Academy of Medicine of Paris, a great figure of French organic psychiatry, whose broadness of mind has allowed me to become acquainted with the vast field of psychopathology presumed "rickettsial" and to embark on a fruitful collaboration.

Finally I will add that numerous positive seroreactions in the Giroud microagglutination test have been confirmed by the reaction of immunofluorescence, both by Professor Jadin and in a French laboratory: the correlation has been excellent, not so much as on the strains of virus, as on the seropositivity; and in ELISA on 28 sera (C. Perron, Grenoble, 1985). 22 sera have been tested by microagglutination on a Giroud slope by Professor Jadin of the Institute of Tropical Medicine of Anvers. This test consists of strains propagated in embryonated eggs and by immunofluorescence (IF) in a French laboratory working on strains prepared by the Merieux Laboratories (France).

Seven of the sera were tested in multiple on the same day.

A total of 22:22 were revealed positive in microagglutination and 20:22 positive in IF with significant titres.

# Here are 15 sera tested at different dates:

GAU	30.10.86	R. Prowazeki R. Mooseri	+++	1/320 1/160
	30.10.86	R. Conori		1/40 (IFI)
RIC	Feb. 87	R. Mooseri	++++	1/160 .
	25.5.87	R. Conori		1/40 (IFI)
LAP	Oct. 86	R. Conori	++++	1/160
	13.3.87	R. Mooseri R. Conori		1/40 1/40 } (IFI)
BOU	Nov. 86	R. Mooseri R. Burnetti	+++ (II)++++	1/160 1/20
	13.3.87	R. Conori R. Mooseri	(2)	1/80 1/40 } (IFI)
MAR	5.6.87	R. Conori R. Mooseri		1/40 1/40 } (IFI)
	2.2.87	R. Mooseri	++++	1/160
		R. Burnetti	(II) ++++	1/20
GAY	29.6.87	R. Conori C. Burnetti		1/40 1/160 } (IFI)
	10.4.87	R. Mooseri	++++	1/160
		E. Conori	+++	1/160
		C. Burnetti	(II) ++++	1/20
CUC	1.7.87	R. Conori		1/40 (IFI)
	22.4.87	R. Prowazecki	+++	1/320
	microaggl.	R. Mooseri	++++ (T) +++	1/160 1/20
	tintation (Giroud)	C. Burnetti	(II) +++	1/20
	(GHoud)			
EVE	29.5.87	R. Conori		$\frac{1/40}{1/40}$ } (IFI)
	19.3.87	R. Mooseri R. Prowazecki	+++	1/320
	19.5.67	R. Mooseri	++++	1/160
		C. Burnetti	(II) ++++	1/20
DUC	23.6.87	R. Conori		1/40 (IFI)
Doç	25,0.0	C. Burnetti		1/80
	16.4.86	R. Mooseri	++++	1/160
		R. Conori	+++	1/160
FRE	11.12.86	R. Conori		1/160 } (IFI)
		R. Mooseri		1/40
	6.6.86	R. Mooseri	++++	1/160
BER	24.5.85	R. Moseri	++++	1/160
L.		R. Conori	+++	1/160 1/160
	17.12.86	R. Conori	- 4	1/40 } (IFI)
		R. Mooseri		1/40 ,

BER C.	11.12.86	R. Conori C. Burnetti	Negative	(IFI)	
		R. Mooseri			
	Nov. 85	R. Mooseri	++++	1/160	
MOR	23.7.86	R. Conorii		1/320 1	(IFI)
		R. Mooseri		1/320 }	(111)
		C. Burnetti	negative		
	29.6.86	R. Mooseri	1111	1/160	
GUI	30.1.87	R. Mooseri	++++	1/160	
		C. Burnetti	(II) ++++	1/20	
	27.4.87	R. Conori		1/40 (II	FI)
FLA	20.11.86	R. Prowazeo	:ki ++++	1/320	
		R. Mooseri	++++	1/160	
		R. Conori	++++	1/160	
		C. Burnetti	(II) ++++	1/20	
	3.6.87	R. Conori		1/160	(TET)
		R. Mooseri		1/40 }	(IFI)
		*	* *		
	He	re are the 7 sera	tested on the same day	y	
EST	Conori	1/40 (IFI)	R. Mooseri	+++	1/160
LOI	COROTT	1/40 (111)	R. WIOOSCIT	TIT	1/100
FER	Negative	(IFI)	R. Mooseri	+++	1/160
VAL	R. Conori	1/40 (IFI)	R. Conori	++++ 1	1/160
POR	R. Conori	1/80 1 (TEI)	R. Mooseri	++++ ]	1/160
	R. Mooseri	1/40 } (IFI)	C. Burnetti		1/20
	III IVIOODOII	1/10 2	C. Danou		1/20
GAL	R. Conori	1/80 (IFI)	R. Mooseri	++++	1/160
			R. Prowazecki	+++ 1	1/320
LET	R. Conori	1/40 (IFI)	R. Mooseri	+++ •1	1/160
13331	III CONOII	1/10 (111)	R. Conori		1/160
			R. COHOII	1117	1,100
DEI	R. Conori	1/40 (IFI)	R. Prowazecki	++++ 1	1/320
			R. Mooseri	++++ 1	1/160
			R. Conori	+++++ 1	1/160

As regards the sera tested in ELISA, they are multiple schlerosis sera all positive in microagglutination (Giroud) which are all revealed positive in ELISA vis-à-vis R. Conori (cultivated on embryonated eggs; Professor Jadin) with presence of Ig6 in 81,5% of cases, and presence of IgM in 82% of cases.

This work was carried out in the Virology Department of C.H.U. of Grenoble (France) (Perron H. 1985).

The neuropsychic impact is almost constant in acute rickettsiae or even chronic in the instance of extra-neurological foci owing to the fact that the properties of the rickettsial toxins, which are vaso-constrictive and demylinising; and which are discharged into the circulatory stream (experiment by Levaditi) and also due to the fact of the great sensitivity of the nerve cells to anoxia and by the slight possibility of their regeneration.

The neuropsychopathological manifestations of acute rickettsiae have been described by numerous writers, including Porot as early as 1909 for the typhus epidermic: deranged state at times manic-depressive tonality, deliria with onirism, ambulatory automatisms, at times suicidal impulses (jumping from window), quite unusual disorders of the body scheme and of consciousness, at time preluding stupor and coma.

These disorders can open up the clinical scene and pose diagnostic difficulties even in an epidemic milieu and can be revelatory (typhus epidemic in Serbia during World War I).

Generally regressive, they are able to develop in only one case out of a hundred, according to Guttman, towards a deranged or chronic psychotic state, either immediately following on the acute episode or which a delayed appearance, being able to last for more than ten years.

The present world-wide spreading of rickettsiae, their tendancy to chronicity directly after an acute episode or unapparent primary or secondary infection after a varied period of latency, as numerous authors have recorded after Charles Nicolle and have shown the clinical and epidemiological importance of the long survival of the virulent rickettsiae in their haunts in the reticuloendothelium and vascular linings, allows one to think that a certain number of chronic psychopathological and psychiatric pictures can claim this etiology: chronic Rickettsial vascular encephalitis.

Moreover certain authors incline towards this possible etiology: Gaudineau R., (Department of Neuropsychiatry, Hospital of Bobo-Dioulasso, Upper Volta), in connection with a probable rickettsial etiology of the impairment of the nervous system: (Bull. Soc. de Pathologie Exotique, 1967, 298-376); Lôo P., and Menier J., "Les Rickettsies et neorickettsies en neuro-psychiatrie" (Ann. de Médécine Psychologique, 1967, 119 2, 732); Lôo P., and Mennier J., "Psychose intermittente et rickettsie" (Ibid., 1962, 120, 1, 820.), and a great many other authors.

How is one to arrive at a diagnostic etiology of psychopathic and chronic psychiatric states, all the more difficult as the form becomes more focalised? There I base myself upon my clinical experience and for the majority of therapeutic cases: going from certain syndromes know as "tetanic spasmophile" associated with psychic disturbances, to certain nervous depressions, passing by the clinical pictures of psychoneurotic, hypochondriac or hysterical children in order to terminate with the psychotic pictures, and the schizophrenic and delirious aspect.

A certain number of arguments - epidemiological, clinical, serological, evolutive and therapeutic - must be regrouped.

Epidemiological: Tick bites, contacts with animals of every type, exposed professions, travels to regions of the endemic disease, holidays on farms, consumption of raw milk: facts which are less convincing at present in view of the multiplicity of domestic animals, trips abroad, holidays in the country (farm, camping, etc.).

Clinical: It is to be noted that among all the forms there are common symptoms which are quite regularly re-encountered: frequent first appearance after either psychic or physical traumatism (or both), straight away or at a later date.

Several cases within siblings (veritable families of rickettsia exist): development in sudden bouts or complete remissions, at least at the outset, notably at changes of season and with atmospheric pressure or after stress in the broad sense of the term; bout of fever (inconstant), aggressivity, irritability; depression capable of leading to suicide, attraction by space (temptation to jump from heights), hypersensitivity to noise, light, smell, vertigo or false vertigo, loss of balance, occasional weakness of the kneess resulting in their collapsing, veritable drop attacks, dropping of objects, phenomena of moving spots before the eyes, the seeing of bright lights or shapes, visual eclipses, double or triple vision, visual or auditory hallucinations, delusions of persecution, ambulatory automatism, frenzied convictions, numbness and tingling sensation of the extremities cold and stiff with cyanosis, vaso-motor syndromes able to reach the point of Raynaud's disease, hypersensitivity of the extremities to cold, hot flushes, headache (frequent), spontaneous bruising (vascular fragility), muscular cramps, myalgias contractions of the hands, erratic even congestive and febrile arthralgia, dorsal aches, electric discharges, thoracic oppressions with anxiety, digestive troubles (frequent), profound asthenia (more or less permanent), tachycardiac attacks, palpitations, lipothymic tendancy notably on changes of position up to the point of losing consciousness, hypertension, behavioural instability, impression of an imaginary presence, buzzing of the ears, decline in hearing, loss of memory and intellectual concentration, all signs varying from one day to another and associated differently during the day.

Finally a multiplicity of doctors consulted and medicines tried without result.

The most frequent clinical signs to be found are:

- malaise on changing position;
- vertigo (real or false);
- paresthesis of the extremities;
- vaso-motor flushes;
- drop in temperature of the extremities (permanent or intermittent) with hypersensitivity to cold;
  - distress, tachycardiac attacks, depression, aggressivity;
  - poor memory;
  - troubles of intellectual concentration;
  - phenomena of seeing spots before the eyes;
  - digestive troubles of colitic type;
  - asthenia with psychasthenia.

Serological: Positivity of the microagglutination reaction to often highly raised titres, immediately or after reactivation during treatment: the murine and boutonneuse antigens being more often found, followed by a considerable variation of antibody titres, from one examination to the other or at longer intervals, and intermittent practically constant total negativation, often, but not always, corresponding to the periods of remission.

*Therapeutic*: Favourable development very frequent under treatment, either immediately or at a secondary stage, in the knowledge that the treatment will be very long, several years in chronic forms of long-standing. Besides, the first courses of antibiotic treatments often produce a reactivation of the disorders.

With respect to schizophrenia, out of four cases: 100% positive; one borderline case under treatment with very favourable development after two and a half years; finally five cases of syndromes of delirium with relapses, positive.

For five out of these six cases, there are certain disorders previously cited associated with an initial Raynaud syndrome.

Two cases of schizophrenia belonging to the same family, each member of which excepting the father, namely the mother and one sister, present anxiety-depressive disorders and symptoms associated with a similar circulatory aspect.

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