

## Apoplexy in the everyday practice in the eighteenth century

Biagio Arnone · Claudio Crisci

Received: 5 May 2009 / Accepted: 15 January 2010 / Published online: 9 March 2010  
© Springer-Verlag 2010

**Abstract** We report the original recipes applied to treat apoplexy in the eighteenth century, as written in the personal notes of doctor of that century.

**Keywords** Apoplexy · Eighteenth century · Treatment

### Introduction

In the eighteenth century many illustrious men such as Newton, Lavoisier, Linnaeus, Galvani enlightened science, while magicians like Cagliostro or musicians like Bach and Handel explored other fields, all together giving birth to the “Century of Enlightenment”. What of these new ideas that arrived to lay people? How did contemporary scientists perceive this progress?

### Findings and observations

In his personal notes written in corrupted Latin [1] (Fig. 1), a doctor in a rural village of Southern Italy, in 1746, thoroughly defines apoplexy and the subsequent motor and sensory impairment in the affected limbs “...*si nervi obstructi et rigidi sint cum nec spiritus ad musculorum fibras descendere possint, nec motus papillulis nerveis qui sunt tactus organus ab obiectis extrinsecis impressus valeat ad cerebrum ...*” (if nerves are obstructed and rigid so that neither spirit can descend to muscular fibres nor movement can ascend from the papillae of nerves, the organs of tact which are impressed by the external objects, to the brain ...”), and clinical differences between hemiplegia and hemi-

paresis “...*nonnulli paresym vocant vel leviozem Paralysis si vero sensus et motus non deficit, sed torpet ... Quod si alteruntur totum corporis latus afflicto dicit proprie hemiplegia*” (...many call paresis or mild paralysis if motion or sensitivity is not deficient but lessened.... If a whole side of the body is affected, it is said properly hemiplegia).

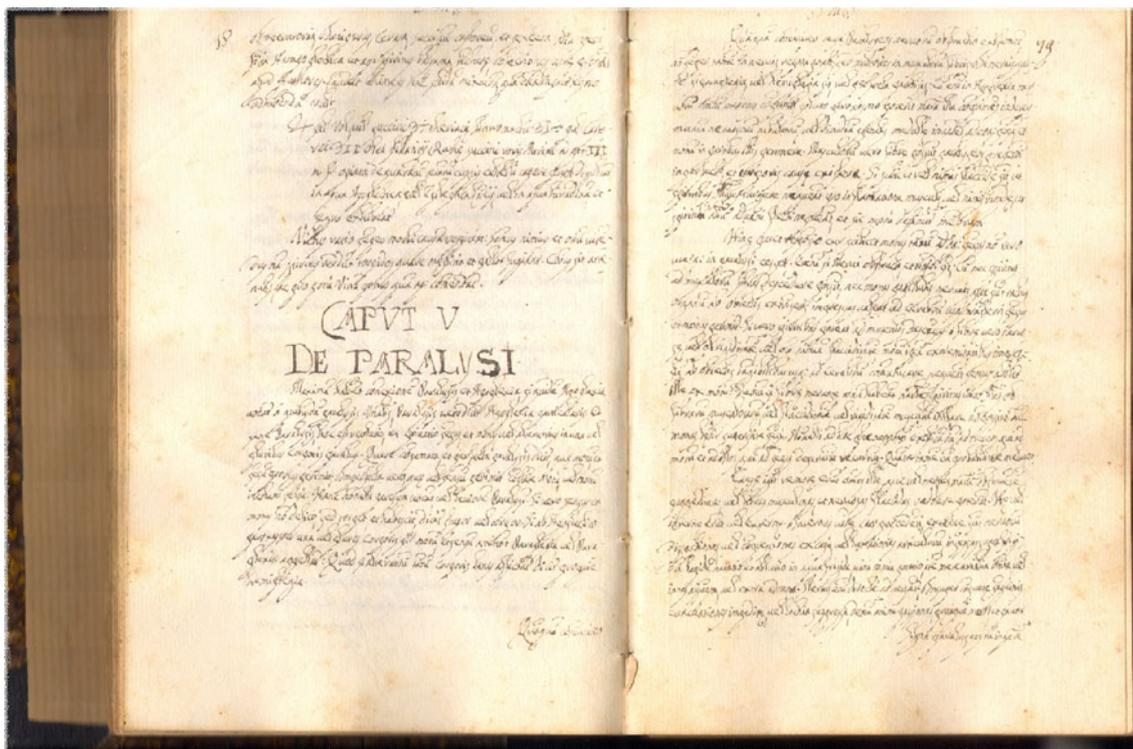
He evaluates also the degree of the lesion based on the general health conditions of the patient, the age, the presence of fever or other disease. Strangely, speech difficulties are not described.

He already knows the “*decussatio pyramidum*” (pyramidal crossing) described by Mistichelli in 1709 and confirmed 1 year later by Pourfour du Petit [2], but does not recognize the involvement of vessels in the aetiology of apoplexy, although Willis had described cerebral circulation and his polygon more than 50 years before. He still prefers the hypothesis of “*obstructio nervorum*” (obstruction of nerves), attributed to Des Cartes, together with the attribution of a major role to the muscle fibres.

At that time, therapy depended basically on herbs, phlebotomy, purges. To heal apoplectic patients, our ancient colleague prescribed herbs as tisanes or baths for different purposes:

- “*Essudatores*” (sudorific) to purify the body, such as extracts of the wood or the roots of sassafras and sarsaparilla (*Smilax aspera*);
- Purges prepared with widow iris (*Hermodactylus*) and gamboge tree (gummi gutta) as recommended by a certain Agilanius Ferdinandus and considered as efficient as phlebotomy, usually done *in latere opposto* (on the other side of the paralysis);
- Herbs like cowslip, called “paralysis herb” even nowadays, sage, lavender, mountain avens, prepared with distilled wine or amber salts;

B. Arnone · C. Crisci (✉)  
Clinic Center, Private Hospital for Rehabilitation, Naples, Italy  
e-mail: claudio.crisci@cliniccenter.it



**Fig. 1** “De Paralysi” chapter of the Eucheridion

- “Awakening” drugs as rosemary;
- Bath salts or fomentations of the paralytic limbs with antimony, cinnabar or marjoram and camomile, bay tree berries and sometimes even with a macabre ingredient: *parte dimidia ossis humani* (a part of human bone ash).

It is moving the scientist’s persuasion to treat such important disease with natural principles, the use and properties of which were probably well known and applied in that time, but almost forgotten at present.

## Conclusion

As a matter of fact, the rationale for therapy was similar to that presently applied in every day practice: fluid

ejection or phlebotomy (nowadays blood pressure control), cordials (nowadays nootropic drugs) ... and magic. After 250 years, in EBM era, there are still more doubts than certainties.

**Acknowledgments** We thank Mrs. Sara Crisci Sigilli and Mons. Clemente Russo for editing and translating the original manuscript.

## References

1. Crisci DA (1743) Eucheridion. (original manuscript)
2. Bonavita V, Di Iorio G (2007) Neurologia Clinica. Medico-Scientifiche (ed)