

The minero-thermal Water of Castéra-Verduzan

In vivo Experimental Study. SEGUIN Benedicte.
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OBJECTIVES

The objective is to measure the therapeutic effect of Thermal Spring water from Castéra-Verduzan used out of apparatus in oral irrigations as into ambulatory in the form of mouthwash.

PROTOCOL

33 healthy patients divided over 2 years
Minéro-thermal Water from Castéra-Verduzan
Three apparatuses of oral irrigations provided with metal clamps
Observations carried out using instruments of examinations (mirrors, tweezers, probes 6/17/23, revealing of plate)
Results noted on individualized computerized cards

METHODS

The therapeutic effects of Thermal Spring are measured on gingivitis created by the absence of oral hygiene, by using 2 types of indices:

- Gingival index
the Gingival Index of LOE and SILNESS (G.I.)
the P.Mr.In Schour and Massler (P.Mr.A.)
- Index of dental plaque (GLICKMAN 1974, CALMY B. 1973)
Oral examination Hygiene Index of Greene and Vermillon (O.H.I.)
Plaque Index of Silness and LOE (PL.I.)
Index of surface of dental plaque of ENNEVERT and STURZENBERGER (I.T.)

The first measurement of the indices is carried out in J-9 when the subjects are still healthy (before any experimentation).

The second measurement is carried out at day 0 (J0) of therapeutic experimental, corresponding to the ninth day of the total absence of oral hygiene.

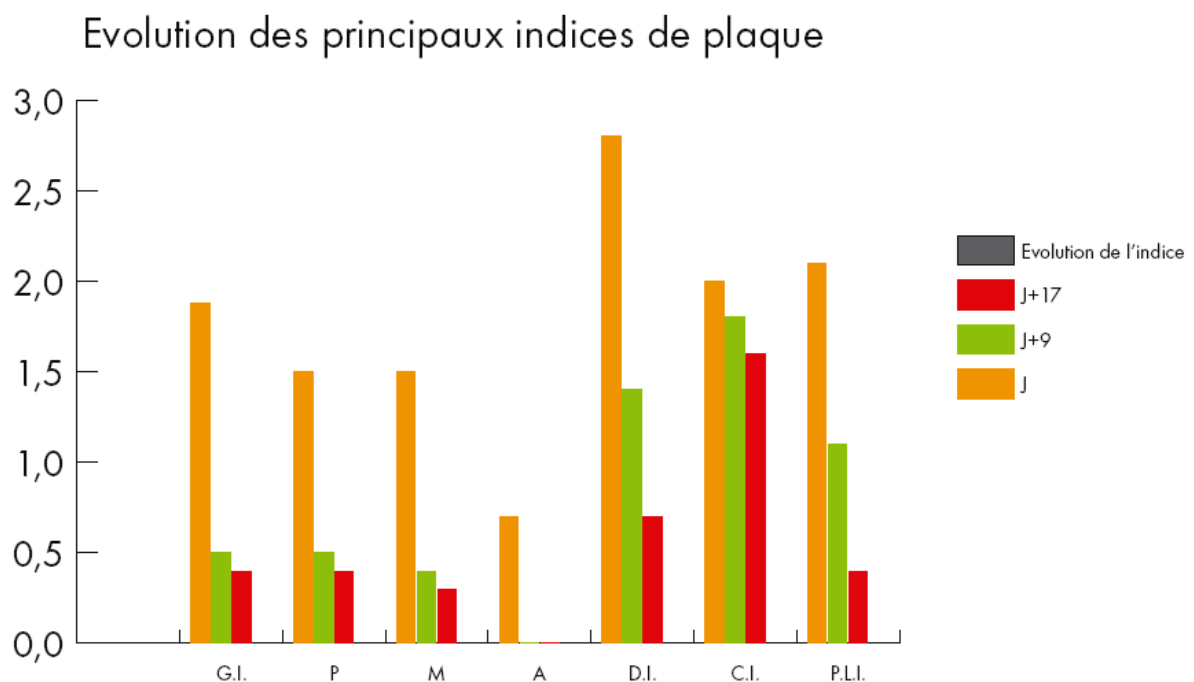
Throughout all cure, the subject carries out two daily mouthwashes morning and evening, followed immediately by measurements of index. Oral mouthwash lasts 15 mn minimum. Throughout the treatment, the subjects do not brush their teeth. The third measurement is carried out at the end of the cure, J+9 day.

After the cure, the subjects resume their normal oral hygiene. The subjects will have carried with them 2 liters of Thermal Spring of Castéra-Verduzan and will take care to make 1 or 2 mouthwash each day. Last measurement is carried out one week after the end of the cure, i.e. in J+17.

RESULTS

	Index	J-9	J	J+9	J+17	Index evolution
	G.I.	0,49	1,88	0,5	0,4	- 18%
P.M.A.	P	0,5	1,5	0,5	0,4	- 20%
	M	0,6	1,5	0,4	0,3	- 50%
	A	0	0,7	0	0	
O.H.I.	D.I.	1,5	2,8	1,4	0,7	- 53%
	C.I.	2	2	1,8	1,6	- 20%
	P.L.I.	1,3	2,1	1,1	0,4	- 69%
	I.T.	16	16	14	12	- 25%

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CONCLUSIONS

With regard to G.I. and the P.Mr., the subject even finds improves its index of reference as of the ninth day of the cure. The indices after eight days of treatment into ambulatory are better than front. The subject presents a gum of better health.

With regard to the D.I. (Remains Index) allowing to evaluate the quantity of plate covering surface with the tooth, as of the ninth day of the cure, the subject improves its D.I. of reference, what proves the action anti-plate of the Water of Castéra-Verduzan. After eight days of ambulatory treatment, the subject decreases by half its index of plate of reference.

With regard to C.I. (Calculus Index) allowing to evaluate the quantity of biofilm covering surface with the tooth, as of the ninth day of the cure, the results show an improvement of C.I. by dissolution of the biofilm.

While continuing during eight days in ambulatory treatment, C.I. of reference is improved of 20%, in other words, not only, the thermal Spring of Castéra-Verduzan dissolves the dental flora but its neoformation seems inhibited after cure.

With regard to the P.L.I., evaluating the quantity of plate in the vicinity of the gum, we note that as of the ninth day of the cure, the subject improves its oral hygiene of reference. While continuing during eight days in ambulatory treatment, the P.L.I. of reference is improved of more than 3 times since it passes from 1,3 to 0,4.

With regard to the index of surface of dental plaque (Indice de Tartre), one notes at the ninth day of the cure a notable improvement due to the dissolution of the biofilm by thermal Spring. While continuing during eight days in ambulatory treatment, index I.T. of reference is improved of more than 25%.

The thermal Spring of Castéra-Verduzan thus has a positive therapeutic action on the dental plaque.