DISCUSSIÓ

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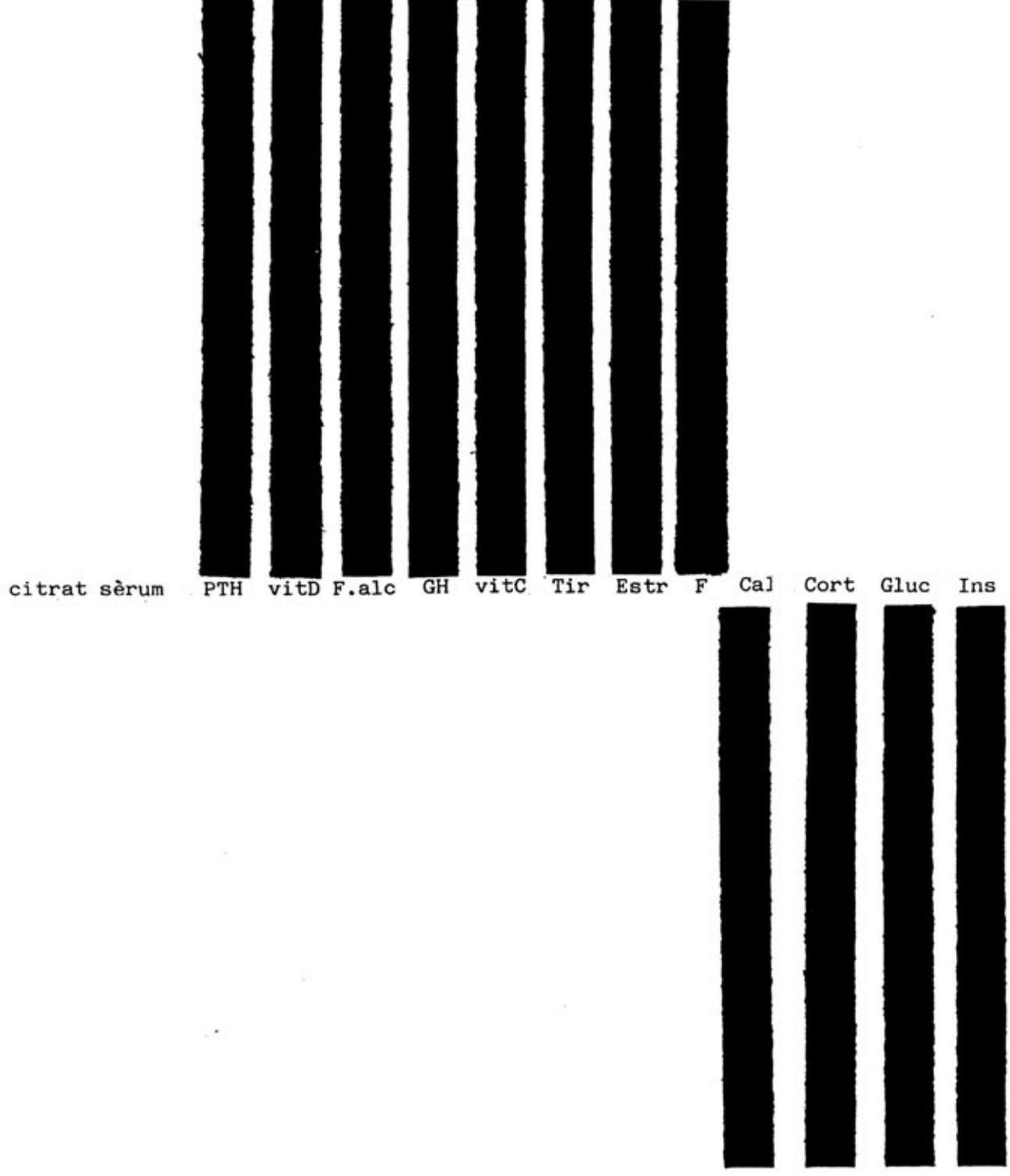
Si el ió citrat no pot entrar al reticle cristal.lí de la hidroxiapatita, perquè és més gros que el tamany del cristall ossi i el 90 % d´aquest citrat està a l´ossada (Taylor T.G. Biochim.Biophys. Acta, 148, (short commun), 1959) - (Brecevic L. i Furedi-Milhofer J. Calcif.Tiss.Int. 28:131, 1979), què hi fa ?.

Si diverses malalties siguin infeccioses, metabòliques o genètiques i àdhuc la ingravitació, que cientment tenen una tendència específica a fer víctima l´os com a premonició de la seva actuació de conjunt (Un dels grans problemes de la pèrdua d´os és la seva universalitat, Garn S.M.i al. Fed.Proc. 26, 6:1729, 1967) - (La heterogeneïtat confusa de moltes malalties metabòliques de l´os prové de l´haver-hi molts camins per arribar a un resultat comú, Burr D.B. Am.J.Anat. 186:216, 1989), no és propici pensar que aquesta posició de conjunt que tendeix a la convergència en l´índole dels trastorns ossis, provocats per les situacions citades sigui regida, més endins, per un constituent - l´àcid cítric - que orienti la finalitat coincident donada la seva omnipresència a l´os ?.

I a més, per què no, sabent que la majoria de substàncies que custodien la modelació i la remodelació de l´os, directa o indirectament, demostren tenir un fort atraïment per l´àcid cítric que es palesa movent la seva quantia a l´organisme ?.

Si apleguem les tres interrogacions es pot córrer el risc de suposar que l´àcid cítric, ja que hi és i per no perdre peculiaritat, davant de la impossibilitat d´entrar a la intimitat de l´os opti per romandre al seu embolcall d´hidratació fent de conduïdor diferenciat que tria les substàncies que han de passar o sortir i a la inversa - rutina perenne - del cristall.

Perquè aquesta suggerència sigui consentida s´ha d´admetre que que pugui haver-hi uns intersticis habituals o circumstancials, sempre específics, que donin pas a les matèries d´intercanvi. Com afegiment, " tots els cristalls d´hidroxiapatita contenen un gran nombre de llocs vacants i intersticis pels ions " (Schottky) - i " els defectes de cristal.lització molt freqüents en les apatites fan que augmenti la solubilitat " (Arens i al. Caries 11:186, L977) , finalment, " els ions citrat ataquen la superfície de l´os mineral, desplaçant simultàniament una quantitat equivalent de ions fosfat " (Pak i al. Calcf.Tiss Res. 4:69, 1967).


citrat sèrum
PTH
vitD
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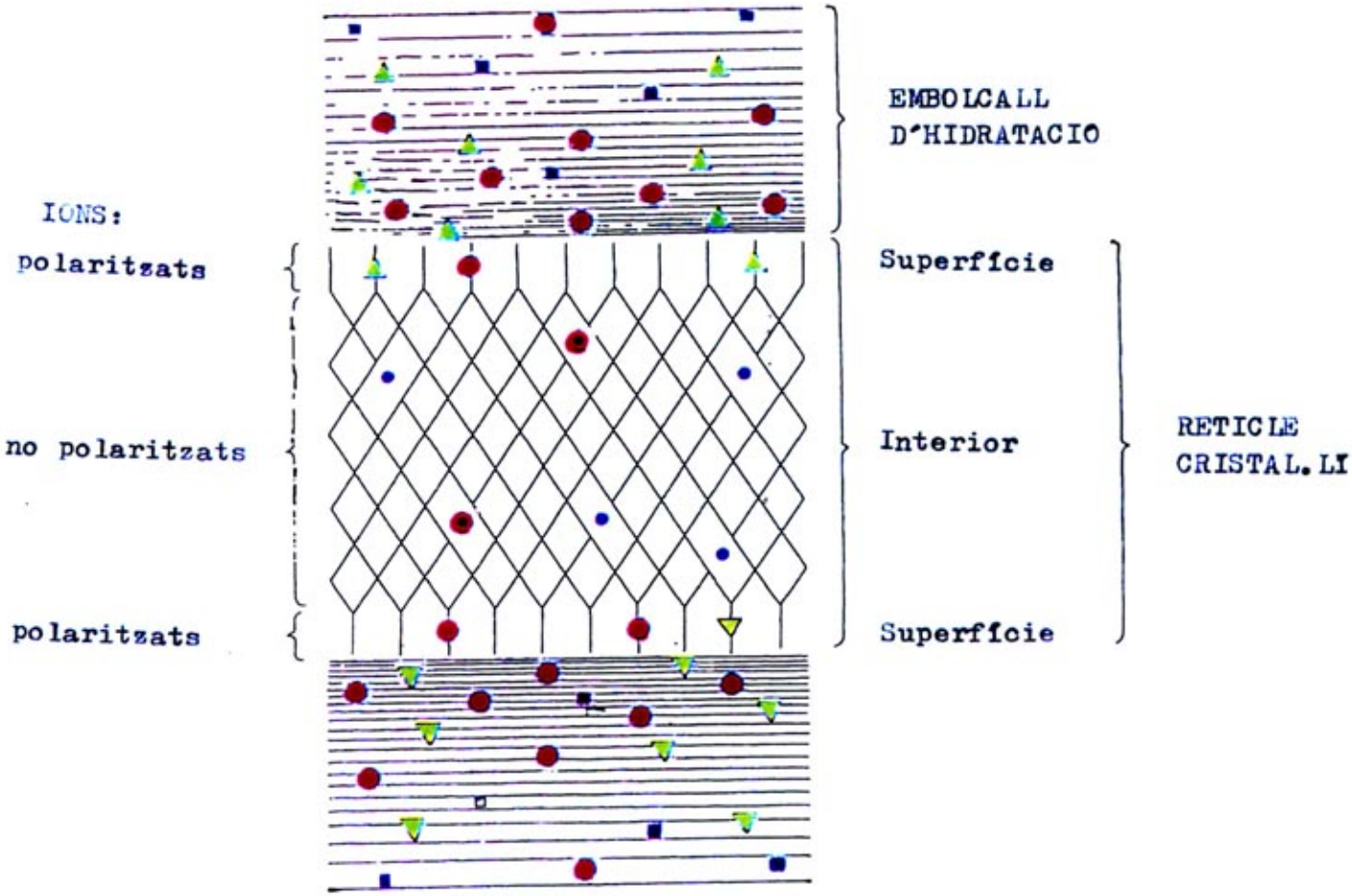

- Llacunes del reticle
- Estroncio Sr^{++} o Radi Ra^{++} a l'interior del reticle cristal.lí, ocupant el lloc del calci
- Sodi Na^{+}, citrat $C_6H_5O_7^{3-}$, carbonat $CO_3^{=}$, fluor F^{-}, a la superfície del cristall en substitució del Ca^{++} o del fosfat $PO_4^{\equiv}$ polaritzat
- Potasi K^{+}, Clor Cl^{-}, solament a l'embolcall d'hidratació

EPÍLEG.

" la disminució local del pH (pot ésser per certs efectes específics del ió citrat) seria suficient per a explicar la solubilització del mineral.
G. Vaes Symp.Int. sur l´Osteomalacie, pag.30, Tours (1.965).

CONCLUSIONS

CONCLUSIONS.

En els animals tractats s´evidencia:

a) Un augment significatiu de l´àcid cítric sèric.
b) Que les fosfatases alcalines disminueixen proporcionalment a l´augment de l´àcid cítric.
c) Que l´anatomia estadística de les vísceres fetge, ronyó, melsa, cor i pulmó no presenta cap alteració a tenir en compte.
d) Que l´anàlisi hemàtic, tret de les variacios de l´àcid cítric i de les fosfatases alcalines està dins dels marges tolerats.
e) Que no hi ha desdibuixamet dels mitocondris de cor.
f) Un major creixement, en llargada, dels ossos llongs.
g) Un remodelament subperiòstic aberrant.
i) La massa òssia lamel.lar en franca remoció del mineral.

It seems:

Que la inhibició malònica respecte a la repercussió en el remodelament ossi ha seguit un curs, amb tots els alliçonaments a fer-hi i les correccions necessàries, d´aproximació " lineal " al resultat buscat.

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