Subject: verständnisfrage, acetylcholine sebocyten
Posted by tristan on Sat, 28 Apr 2007 14:01:06 GMT
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was check ich da nicht? acetylcholine macht sebocyten proliferation aber anticholinergica machen seborrhoe?
(pdf)

oder

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&a
mp;db=PubMed&list_uids=15507109&dopt=Abstract

Most significantly, the regulated expression of ACh-R in sebaceous glands advocates a role for ACh in sebum production and as a promoter of sebocyte differentiation, thus offering an explanation for skin diseases associated with altered sebum production after chronic nicotine exposure.

File Attachments
1) acetylcholine sebocyte biology.pdf, downloaded 159 times

Subject: Re: verständnisfrage, acetylcholine sebocyten
Posted by pilos on Sat, 28 Apr 2007 15:38:37 GMT
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tristan schrieb am Sam, 28 April 2007 16:01was check ich da nicht? acetylcholine macht sebocyten proliferation aber anticholinergica machen seborrhoe?
(pdf)

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das abstract ist ein bisschen zusammengeschustert...

das kann man so nicht eindeutig daraus ableiten...man müsste das ganze lesen....

Subject: auch was zu sebocyten
Posted by kkoo on Sat, 28 Apr 2007 16:20:25 GMT
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ist das eher grundlagenforschung, oder schon in der nähe der praxis?

zitat: "J Invest Dermatol. 2007 May;127(5):1042-51. Epub 2006 Jun 15.

Inhibitors of dipeptidyl peptidase IV and aminopeptidase N target major pathogenetic steps in acne initiation.
Thielitz A, Reinhold D, Vetter R, Bank U, Helmuth M, Hartig R, Wrenger S, Wiswedel I, Lendeckel U, Kahne T, Neubert K, Faust J, Zouboulis CC, Ansorge S, Gollnick H.

Department of Dermatology and Venereology, Otto-von-Guericke University Magdeburg, Magdeburg, Germany. anja.thielitz@medizin.uni-magdeburg.de

"Acne is a chronic disease hallmarked by sebaceous hyperplasia, follicular hyperkeratosis, and inflammation. Parallel targeting of these factors is required to treat acne effectively. Inhibitors of dipeptidyl peptidase IV (DP IV) and aminopeptidase N (APN) show strong anti-inflammatory effects on immune cells and therapeutic efficacy in autoimmune disorders. Our investigation focused on the expression and functional relevance of these ectopeptidases in three cell types which exhibit an altered phenotype in early acne lesions. We showed for the first time expression of DP IV and APN on human sebocytes. In the SZ95 sebocyte cell line, the DP IV inhibitors Lys[Z(NO2)]-thiazolidide and Lys[Z(NO2)]-pyrrolidide and the APN inhibitors actinonin and bestatin suppressed proliferation, enhanced terminal differentiation, and slightly decreased total neutral lipid production. The anti-inflammatory and differentiation-restoring cytokine IL-1 receptor antagonist was significantly upregulated in SZ95 sebocytes and the HaCaT keratinocyte cell line in the presence of inhibitors. Furthermore, the inhibitors suppressed proliferation and IL-2 production of Propionibacterium acnes-stimulated T cells ex vivo and enhanced the expression of the immunosuppressive cytokine transforming growth factor-beta1. Our data provide first evidence for a functional role of DP IV and APN in the sebaceous gland apparatus and for their inhibitors, used alone or in combination, as completely new substances possibly affecting acne pathogenesis in a therapeutic manner."

quelle pubmed

Subject: Re: verständnisfrage, acetylcholine sebocyten
Posted by tristan on Sat, 28 Apr 2007 16:22:19 GMT
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also der zouboulis text ist von so nem treffen, wird wohl nichts außer dem mail schreiben..

und die anderen bekomme ich nicht, aber ich schreib mal ne mail

[The extraneuronal cholinergic system of the skin. Basic facts and clinical relevance]
[Article in German]
Kurzen H.

Klinik fur Dermatologie, Venerologie und Allergologie des Universitatsklinikums Mannheim. Hjalmar.Kurzen@haut.ma.uni-heidelberg.de

Acetylcholine (ACh) is a prototypical neurotransmitter that has recently been recognized to occur extraneuronally in a large variety of cells. ACh and its nicotinic and muscarinic receptors are produced in the epidermis and in the adnexal structures of the skin in a highly complicated pattern. They are also produced in melanocytes, fibroblasts, endothelial cells and immune cells. Through autocrine, paracrine and endocrine mechanisms, the cholinergic system is involved in the basic functions of the skin, such as keratinocyte differentiation, epidermal barrier formation, sweating, sebum production, blood circulation, angiogenesis and a variety of immune reactions. Hence diseases like acne vulgaris, vitiligo, psoriasis, pemphigus vulgaris and atopic dermatitis may be influenced. The exploration of the extraneuronal cholinergic system of the skin has only just begun.

Subject: Re: auch was zu sebocyten
Posted by tristan on Sat, 28 Apr 2007 16:25:06 GMT
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kkoo schrieb am Sam, 28 April 2007 18:20ist das eher grundlagenforschung, oder schon in der nähe der praxis?

zitat: "J Invest Dermatol. 2007 May;127(5):1042-51. Epub 2006 Jun 15.

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quelle pubmed

der name Zouboulis macht immer Hoffnung

Subject: und noch was zu sebocyten
Posted by kkoo on Sat, 28 Apr 2007 16:26:45 GMT
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hätte dieses Rambazole denn vorteile gegenüber oralem isotret.?

zitat: "Br J Dermatol. 2007 Apr 25; [Epub ahead of print]
Oral R115866 in the treatment of moderate to severe facial acne vulgaris: an exploratory study.
Verfaille CJ, Coel M, Boersma IH, Mertens J, Borgers M, Roseeuw D.

Departments of Dermatology and Molecular Cell Biology, GROW, Maastricht University, Maastricht, The Netherlands, and Barrier Therapeutics NV, Cipalstraat 3, B-2440 Geel, Belgium.

Background R115866 (Rambazole(TM); Barrier Therapeutics NV, Geel, Belgium), a new-generation retinoic acid metabolism-blocking agent, is a nonretinoid compound enhancing intracellularly the endogenous levels of all-trans-retinoic acid by blocking its catabolism. By virtue of this property, and the proven positive effects of retinoids in the treatment of acne, R115866 could potentially be a useful drug for acne. Objectives To explore the efficacy, safety and tolerability of systemic R115866 in male patients with moderate to severe facial acne vulgaris (at least 15 papules and/or pustules and at least two nodulocystic lesions). Methods In this exploratory trial, 17 patients were treated with oral R115866 1 mg once daily for 12 weeks, followed by a 4-week treatment-free period. Results At the end of treatment (week 12, n = 16) a mean reduction in inflammatory lesion count of 77.4% (P < 0.001), in noninflammatory lesion count of 58.3% (P < 0.001) and in total lesion count of 76.0% (P < 0.001) was observed as compared with baseline. All lesion counts were significantly reduced from week 4 onwards. Mild side-effects were reported occasionally. Conclusions The current data indicate that treatment with oral R115866 1 mg once daily for 12 weeks in patients with moderate to severe facial acne vulgaris is efficacious and well tolerated and merits further investigation."

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Subject: Re: auch was zu sebocyten
Posted by kkoo on Sat, 28 Apr 2007 16:28:00 GMT
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tristan schrieb am Sam, 28 April 2007 18:25kkoo schrieb am Sam, 28 April 2007 18:20ist das eher grundlagenforschung, oder schon in der nähe der praxis?

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quelle pubmed

der name Zouboulis macht immer Hoffnung

jetzt muss nur noch was gutes "hinten rauskommen"

Subject: Re: und noch was zu sebocyten
Posted by tristan on Sat, 28 Apr 2007 16:37:06 GMT
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kkoo schrieb am Sam, 28 April 2007 18:26hätte dieses Rambazole denn vorteile gegenüber oralem isotret.?

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quelle pubmed

so wie ich es verstehe wirkt es spezifischer und geht nicht so auf die organe (leber).. aber ob es keinen haarausfall macht bleibt wohl abzuwarten. weniger side effects bei ähnlicher wirkung ist ja auf jeden fall ein vorteil, die frage ist nur wie gut es wirkt

---

Subject: Re: verständnisfrage, acetylcholine sebocyten
Posted by tristan on Sat, 28 Apr 2007 16:40:10 GMT
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http://www.nature.com/jid/journal/v126/n11/abs/5700443a.html

ahhhh so...

Subject: Re: verständnisfrage, acetylcholine sebocyten
Posted by tristan on Sat, 28 Apr 2007 16:43:44 GMT
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anecdotal:
http://www.medicalnewstoday.com/youropinions.php?opinionid=7 617
botox caused acne

patent botox gegen acne:
http://www.freepatentsonline.com/20050074466.html

haha, 180°

Subject: Re: verständnisfrage, acetylcholine sebocyten
Posted by tristan on Wed, 02 May 2007 19:04:54 GMT
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In eigenen Untersuchungen konnten
wir, ähnlich wie in der Epidermis, ein
hochkomplexes Verteilungsmuster der
nACh-R und mACh-R in Anagenhaarfollikeln
und in Talgdrüsen der Kopfhautfeststellen. Klinische Hinweise für eine
Rolle des cholinergen Systems bei Krankheiten
der Haare und Talgdrüsen stammen
zum einen von Aknepatienten, deren
Erkrankung bei Nikotinabusus deutlich
schlechter verläuft [28], zu andern
durch die Beobachtung, dass unter Medikation
mit anticholinerg wirkenden
Neuroleptika gehäuft seborrhoische Dermatitiden
auftreten.Bislang ist allerdings
eine direkte Beeinflussung der Sebumsekretion
durch Komponenten des cholinergen
Systems nicht gezeigt worden
[4].

---

[8] .
The non-neuronal cholinergic system has been
implicated in numerous functions in the skin
such as growth and differentiation, adhesion and
motility, barrier formation, sweat and sebum
secretion as well as modulation of the microcirculation.

An important role in human disease,
especially in infl ammatory disorders such as
acne vulgaris or atopic eczema is emerging
together with a wealth of new data on its physiological
role in maintaining skin homeostasis

Increased sebum production, seborrhea,
is associated with several skin diseases including acne
vulgaris or seborrhoic eczema [39] . Increased sebum production
or altered sebum composition may be caused by chronic nicotine
exposure on nAChR present in sebaceous glands explaining
why smoking negatively infl uences acne vulgaris [40] . In sebaceous
glands, the undifferentiated basal sebocytes express the
3, 9, 4, M 3 – M 5 AChRs while the 7, 2, 4, M 2 and M 4 AChR
subunits are produced in mature sebocytes. The sebaceous duct
shows a particularly strong staining with 5, 7 and M 3 sera. The
presence of the nAChR suggests a role for ACh in sebum production
and as promoter of sebocyte differentiation.
