

Od vrbove skorje do sodobnih analgetikov

Predavatelj:
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UL - Fakulteta za farmacijo

TEDEN
MOŽGANOV
2019

NA PRAGU BOLEČINE



Univerza v Ljubljani
Fakulteta za matematiko in fiziko

SPECIALISTIČNA ORDINACIJA ZA

ULTRAZVOK

Mojca veri Mitterer, dr. med.
spec. za ultrazvok

APOTEKA

M I K L A V Ž



NOVARTIS

Thomy F. E.

Janssen



VZAJEMNA
zdravstvena zavarovalnica

THE
DANA
FOUNDATION



FENS
Federation of
European
Neuroscience
Societies



videolectures.net
exchange ideas & share knowledge

ZRC SAZU

SKORJA VRBE

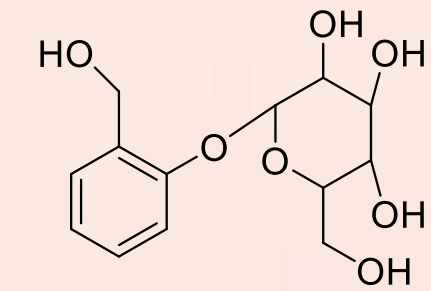
- **Salicis cortex**
- vrba
- *Salix* sp.:
 - *S. purpurea* L. – rdeča v.,
 - *S. daphnoides* Villars – volčinasta v.,
 - *S. fragilis* L. – krhka v.
- Salicaceae (vrbovke)
- Evropa, Centralna Azija
- antipiretik, analgetik, antirevmatik
- 1-3 % salicina



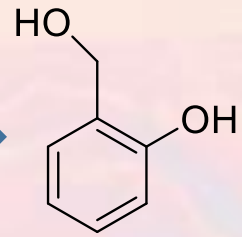
Vrbova skorja



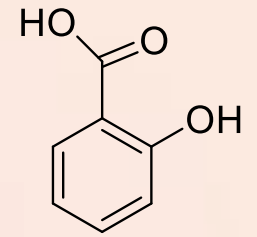
Sumerci
Egipčani
Kitajska tradicionalna medicina
Hippocrates (460-377 p.n.š.)



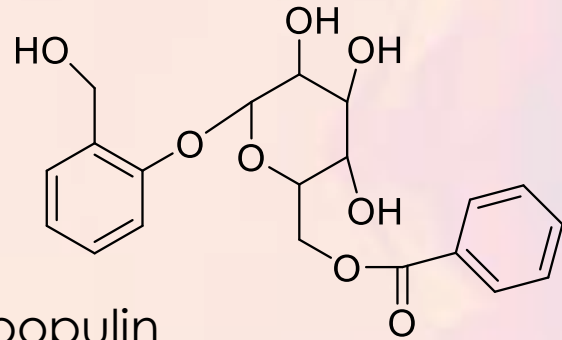
salicin



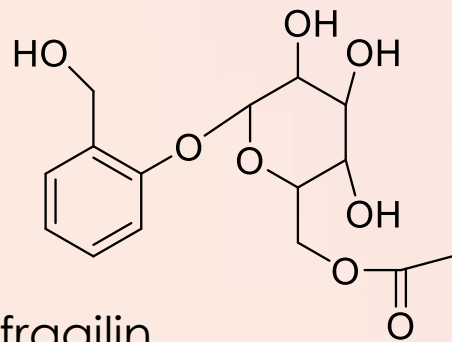
salicilni alkohol



salicilna kislina



populin



fragilin

Vrbova skorja - Aspirin



Salix sp.



Filipendula ulmaria
= Spirea ulmaria

alternativni viri

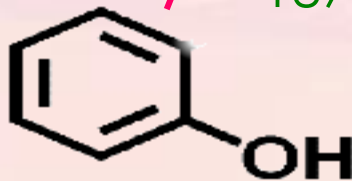


Gaultheria
procumbens

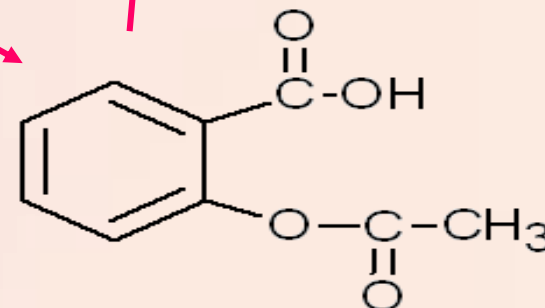
polsinteza
1839



sinteza
1872



polsinteza
1853



acetil salicilna kislina

pocenitev,
učinkovitost
1893

rhage—has been noted in cases of hysteria, and, although favoured, and even induced, by emotional states (just as pallor by the emotion of fear, or blushing by that of shame), they could never be said to be produced *voluntarily*. I may be wrong, but I confess that to me there seems a wide difference between an act of wilful deceit and the influence of imagination or emotion. I, for one, do not believe that those modern martyrs—as Louise Lateau, for instance—who reproduce in their own persons every seven days the phenomena of the Passion, do so voluntarily and with intent to deceive. It is true that Virchow gave it as his opinion that Lateau was either an impostor or a miracle-worker; but is there not a third view to take of her—viz., that she is simply a hysterical girl whose fancies and imaginations, wrought on by strong religious feeling, intensify at certain intervals, conditions common alike to her and to other hysterical subjects? (See Bourneville, "Louise Lateau.")

As to the influence produced by the application of metals to the anæsthetic and ischæmic regions, it is unnecessary for me here to enter into details. The facts stated in the elaborate report to the Société de Biologie (*Gaz. Méd.*, 28 Avril, 1877) of the commission appointed to inquire into the question, consisting of MM. Charcot, Luys, and Dumont-pallier, have now received ample confirmation in this country. Whatever the interpretation of these facts, they cannot be dismissed as chimerical because those experimented on are the subjects of hysteria; for the surprising result was obtained by that commission of the application of the metals being effectual in restoring sensibility to cases of anæsthesia depending on organic lesion. In such cases the application was actually curative; but in hysterical anæsthesia, the effect, striking as it is, is only temporary, and apparently has no influence on the cause of the disease. It was precisely thirty years ago that Dr. Burq published his first experiments in this direction. They appeared in Dr. Elliotson's journal (the *Zoist*), and thus had the taint of mesmerism upon them. The same rock upon which the reputation of that great physician was wrecked proved fatal also to Dr. Burq's discoveries. Nor can it be denied that they were justly decried; for as with mesmerism, so here the new-found agent was vaunted to cure diseases to a far greater extent than was warranted by facts. Reproduced now in another (which, if not a wiser, is at least a more sceptical) generation, and submitted to exhaustive and minute scrutiny by men of high scientific reputation, there need be no fear that the precise and legitimate bounds of inquiry will be overstepped.

Nottingham-place, W.

NOTES OF

CASES OF RHEUMATIC FEVER TREATED BY SALICYLIC ACID.

BY ALFRED KEBBELL, M.R.C.S. ENG.,
LATE HOUSE-SURGEON, YORK COUNTY HOSPITAL.

CASE 1.—J. C.—, aged twenty-one. This was the third attack. On Jan. 9th, 1877, patient ran a mile to catch a train, and perspired freely. The day was very cold. She was a tall, stout girl, but of a sallow, unhealthy appearance. On the day following I saw her. She complained of not feeling well, of headache, pain in several joints, and of shortness of breathing. She kept about all day, but in the evening was compelled to go to bed. The temperature was then 105°. There was pain, swelling, and redness in both wrists and ankles; face flushed; some dulness at base of lungs posteriorly. Ordered milk and beef-tea diet, and twenty grains of salicylic acid was given every three hours.

Jan. 11th.—After taking about eight doses of the acid, the temperature is down to 101°; pain much less in the joints affected, but there is delirium, with much depression; urine dark-coloured; pain about region of the heart; pericardial friction-sound to be heard. Salicylic acid discontinued, and the usual remedies resorted to.

The patient continued to get worse, and died at the end of six days from pericarditis, accompanied by cerebral symptoms.

CASE 2.—A. B.—, aged thirty, cook. Has had rheu-

matic fever once before. I saw her on Jan. 14th, 1877. About a week before she began to have pain in several joints, accompanied by swelling. She now has effusion into both knee-joints, the right being the worst; also in both ankles and wrists. Has passed a very restless night; sweating freely; tongue furred. The records of the temperature were unfortunately not kept for the first few days of the illness. I prescribed fifteen grains of salicylic acid to be taken every three hours. The joints to be wrapped in cotton-wool.

Jan. 15th.—Very much better; passed a good night; says she began to feel better after she had taken about three or four doses of the medicine; effusion into knees nearly gone; can move round in bed—an impossibility yesterday. Although I do not remember the exact degree of temperature, I know that it was lowered about three degrees.

16th.—Still improving; mixture to be taken every six hours.

18th.—Has continued the mixture till to-day; seems almost well as far as the rheumatism is concerned; to take fifteen minims of tincture of perchloride of iron three times a day.

20th.—Going on well.

24th.—Return of the rheumatism; temperature 99.4°. To return to the acid mixture.

25th.—Temperature 98.4°; all the pain gone again; good night; sweated freely; complains of a peculiar feeling about the head and throat; vomited once this morning.

29th.—Slight return of pain in right shoulder and hip. Ten grains of the acid every three hours; eight doses given.

Feb. 2nd.—Continues better; to take the mixture twice a day.

5th.—Free from pain; mixture to be taken occasionally.

9th.—Quite well.

CASE 3.—J. S.—, aged thirteen, schoolgirl. First seen Feb. 11th, 1877. This is the first attack. Three days since she commenced to have pain in several joints. Temperature 102.6°. Right shoulder and wrist and both knees and ankles affected; great pain, which prevents her sleeping; she was screaming all night with the pain; cannot move herself in bed; no sweating. To take eight grains of salicylic acid every four hours.

Feb. 12th.—Passed a good night. Temperature 101°. Much easier. Can now turn herself in bed. Has turned herself right round in bed to speak to me. Left knee most painful, red and swollen. Continue mixture.

13th.—Temperature 98.4°. Very good night; almost free from pain.

15th.—Temperature 98.4°. Quite well. To get up to-day. Mixture to be taken if there is any return of the pain.

19th.—I called to see her, and found her downstairs nursing the baby.

CASE 4.—W. C.—, aged fifty-five, farmer. First seen June 28th, 1877. This is the fourth attack. Commenced a few days since with pain in the ankles. Temperature 101°; pulse 100. Both knees, ankles, and wrists now affected. To take ten grains of salicylic acid every two hours. Cotton-wool to joints. Ten grains of compound ipecacuanha powder at bedtime.

June 29th.—Temperature 101°. Restless night. Knees feel better. The patient is a very heavy man, weighing about seventeen stone. He is quite unable to move himself; lies with his feet over the end of the bed.

30th.—Temperature 99°; pulse 90. Passed a capital night. The patient and friends are much pleased at the sudden improvement. This morning he has been out of bed, and walked round the room. Mixture to be taken every three hours. Urine dark-coloured.

July 1st.—Not quite so good a night, but he had some friends to see him last evening, who stayed too long. Free from pain, except in left hand and wrist. Mixture to be taken every six hours.

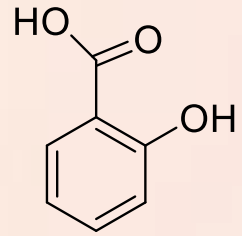
3rd.—Going on well. Temperature 98°. Is very anxious to get up to-day. To sit up for a short time. Mixture to be taken three times a day.

4th.—Not quite so good a night. Slight return of pain in right shoulder.

5th.—Temperature 101°; pulse 90. Return of pain in both wrists, left knee, and shoulders. Mixture to be taken every two hours.

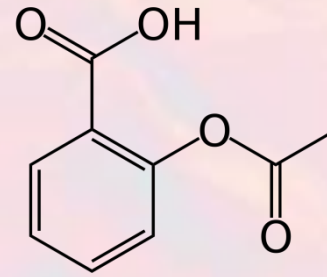
6th.—Temperature 98°. Much better; good night. Mixture every three hours.

Drugi analgetik po istem principu

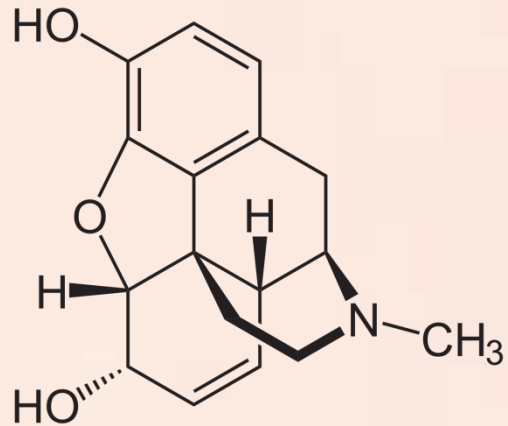


salicilna kislina

acetilacija

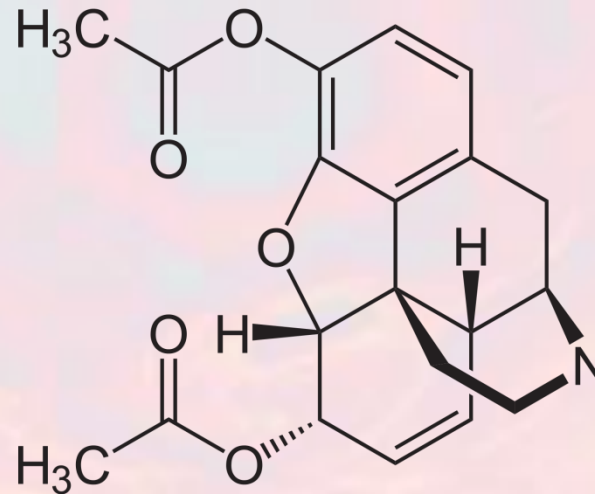


acetilsalicilna kislina



morfin

acetilacija



heroin



En la irritación
producida por la tos, bronquitis

y otros catarras de las vías respiratorias, acóbase al JARABE BAYER de HEROINA, excelente e insensible hasta para las niñeras, administrado según la prescripción.

El JARABE BAYER de HEROINA apaga la tos, alivia los dolores, permite un sueño reparador, aun cuando hubiera sido perturbado por los accesos de tos, insomnio nervioso, diarrea, etc.

Con él se conseguirá abreviación de la enfermedad.



Tráigase en todas las farmacias y droguerías JARABE BAYER de HEROINA, en el envase de cristal con la Cruz Bayer. Precio: Farmacia 1,15. Véase envase en el prospecto.

Hecho en las instalaciones de la Bayer AG.

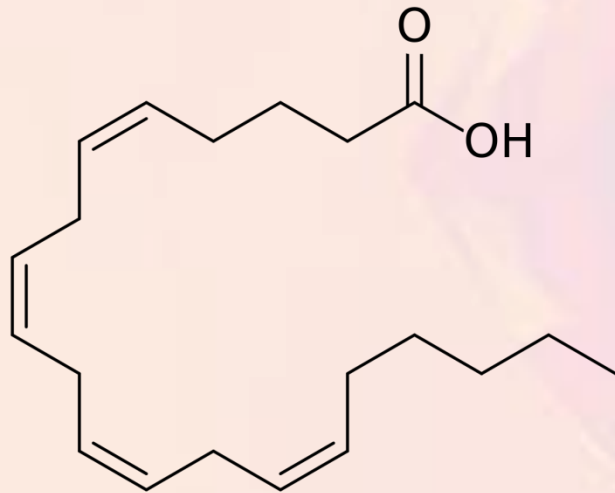
Jarabe Bayer de Heroína



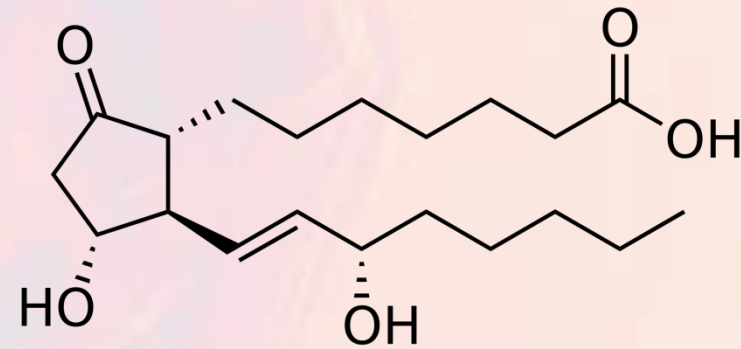
mehanizem delovanja salicilatov

1972 John Robert Vane odkrije mehanizem

- Nobelova nagrada za medicino 1982
- inhibicija ciklooksigenaze (COX; prostaglandin-endoperoxid sintaza, PTGS)



arahidonska kislina



prostaglandin

Drugi učinki

Acetilsalicilna kislina:

- antitrombotik

Salicilna kislina:

- keratolitik
- rastlinski hormon
- SPF

Hvala za pozornost.
Vprašanja?

