Phenothiazine und andere Dopaminantagonisten

„1876 wurden die beiden Farbstoffe Methylenblau und Thionin (Lauths Violett) hergestellt, die beide die Phenothiazin-Struktur enthalten. In den nächsten Jahren wurde Methylenblau als Mittel gegen Malaria, Kopfschmerzen oder Depressionen versucht, konnte sich jedoch nicht durchsetzen. … In der Tiermedizin wurden sie als Wurmmittel eingesetzt…. Erst in den 1940er Jahren begann sich die medizinische Forschung wieder vermehrt den Phenothiazinen zuzuwenden. Die französische Pharmafirma Rhône-Poulenc entdeckte Phenothiazine mit antihistaminischen Eigenschaften. Dies führte 1950 zur Synthese von Neuroleptika (Chlorpromazin, Thorazine®)“. Quelle: http://de.wikipedia.org/wiki/Phenothiazine

Zellkerntherapeutika, cell nucleus therapeutics: Methylenblau (Rember®)

"In 1876, the two dyes methylene blue and thionine (Lauth's violet) were produced, both of which contain the phenothiazine structure. In the next few years, methylene blue has been used as an antimalarial drug, headache or depression but has failed. ... In veterinary medicine they were used as a worm remedy .... It was not until the 1940s that medical research began to turn increasingly to phenothiazines. The French pharmaceutical company Rhône-Poulenc discovered phenothiazines with antihistaminic properties. This led in 1950 to the synthesis of neuroleptics (chlorpromazine, Thorazine®) ".

“Phenothiazine is an organic compound that occurs in various antipsychotic and antihistaminic drugs. It has the formula S(C6H4)2NH. … The compound is related to the thiazine-class of heterocyclic compounds. Derivatives of the parent compound find wide use as drugs”. Source: http://en.wikipedia.org/wiki/Phenothiazine

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« Methylene blue is used as a single dose of 1.5 -2 mg /kg IV over 20 min to 1hr for rescue treatment. … Hence Methylene Blue is being investigated for the photodynamic treatment of cancer. … The relationship between Methylene blue and Alzheimer's disease has recently attracted increasing scientific attention. It has been shown to attenuate the formations of amyloid plaques and neurofibrillary tangles and partial repair of impairments in mitochondrial function and cellular metabolism. … Methylene blue is a safe drug when used in therapeutic doses (<2mg/kg). But it can cause toxicity in high doses. The features of toxicity being cardiac arrhythmias, coronary vasoconstriction, decreased cardiac output, renal blood flow and mesenteric blood flow; increased pulmonary vascular pressure & pulmonary vascular resistance and gas exchange deterioration. It also turns urine greenish blue and bluish discoloration of skin and mucosa which is self limiting. Due to its tissue reactive properties, a case of skin and fat necrosis followed by a dry gangrene of the skin in a female patient with breast cancer who underwent sentinel lymph node biopsy localization using peri-tumoral injection of Methylene blue dye has been reported. It can also cause hemolytic anemia characterized by Heinz body formation especially in pts with severe renal insufficiency and glucose-6-phosphate dehydrogenase (G6PD) deficiency. Neonates are particularly prone to adverse effects of Methylene blue. It causes hyperbilirubinemia, meth-Hemoglobin formation, hemolytic anemia, respiratory distress, pulmonary edema, photo toxicity and bluish discoloration of tracheal secretions and urine. Methylene Blue also interferes with the pulse oximeter's light emission resulting in falsely depressed oxygen saturation reading.
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- **Die Thioester Welt, the thioester world**
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