Porphyria and Hormone Replacement Therapy


Author(s): Andersson, C; Innala, E; Bäckström, T

Source: Journal of internal medicine; Aug 2003; vol. 254 (no. 2); p. 176-183

Abstract: OBJECTIVE To describe the clinical expression of acute intermittent porphyria (AIP) in women, their use of exogenous sex hormones, and the effects on AIP. DESIGN A retrospective population-based study. SUBJECTS All women aged > or = 18 years (n = 190) with DNA-diagnosed AIP in northern Sweden. RESULTS A total of 166 women (87%) participated; 91 (55%) had manifest AIP. Severe attacks were reported by 82%; 39% reported recurrent premenstrual AIP attacks and 22% reported chronic AIP symptoms. Oral hormonal contraceptives had been used by 58% of all these women and by 50 with manifest AIP (57%). Twelve women (24%) associated oral contraceptives as precipitating AIP attacks; in nine cases their first attack. One woman experienced relief from AIP symptoms. On commencing their treatment, 72% of the women with manifest AIP had not yet suffered their first attack. Twenty-two women (25%) aged > or = 45 years had used hormonal replacement therapy (HRT) at menopause to remedy climacteric symptoms (the percutaneous route was most frequently used); no AIP attack was precipitated. HRT to remedy vaginal dryness was used by 26 women (28%) aged > or = 45 years without triggering an AIP attack. Miscarriages were more frequent in women with manifest AIP (50%) than in the latent group (30%, \( P = 0.014 \)). CONCLUSIONS About half of the women with AIP had used oral hormonal contraceptives. As 25% of women with manifest AIP reported attacks associated with such drugs, caution must still be recommended. Menopausal HRT only rarely affected the disorder. Miscarriage was more common amongst women with manifest AIP.

Author(s): Pischik, Elena; Kauppinen, Raili

Source: The application of clinical genetics; 2015; vol. 8; p. 201-214

Publication Date: 2015

Publication Type(s): Journal Article Review

PubMedID: 26366103

Available at The application of clinical genetics - from Europe PubMed Central - Open Access

Abstract: Acute intermittent porphyria (AIP) is due to a deficiency of the third enzyme, the hydroxymethylbilane synthase, in heme biosynthesis. It manifests with occasional neuropsychiatric crises associated with overproduction of porphyrin precursors, aminolevulinic acid and porphobilinogen. The clinical criteria of an acute attack include the paroxysmal nature and various combinations of symptoms, such as abdominal pain, autonomic dysfunction, hyponatremia, muscle weakness, or mental symptoms, in the absence of other obvious causes. Intensive abdominal pain without peritoneal signs, acute peripheral neuropathy, and encephalopathy usually with seizures or psychosis are the key symptoms indicating possible acute porphyria. More than fivefold elevation of urinary porphobilinogen excretion together with typical symptoms of an acute attack is sufficient to start a treatment. Currently, the prognosis of the patients with AIP is good, but physicians should be aware of a potentially fatal outcome of the disease. Mutation screening and identification of type of acute porphyria can be done at the quiescent phase of the disease. The management of patients with AIP include following strategies: A, during an acute attack: 1) treatment with heme preparations, if an acute attack is severe or moderate; 2) symptomatic treatment of autonomic dysfunctions, polyneuropathy and encephalopathy; 3) exclusion of precipitating factors; and 4) adequate nutrition and fluid therapy. B, during remission: 1) exclusion of precipitating factors (education of patients and family doctors), 2) information about on-line drug lists, and 3) mutation screening for family members and education about precipitating factors in mutation-positive family members. C, management of patients with recurrent attacks: 1) evaluation of the lifestyle, 2) evaluation of hormonal therapy in women, 3) prophylactic heme therapy, and 4) liver transplantation in patients with severe recurrent attacks. D, follow-up of the AIP patients for long-term complications: chronic hypertension, chronic kidney insufficiency, chronic pain syndrome, and hepatocellular carcinoma.
3. [Estrogen treatment caused acute attacks of porphyria].
Author(s): Wetterberg, L; Olsson, M B; Alm-Agvald, I
Source: Lakartidningen; May 1995; vol. 92 (no. 21); p. 2197
Publication Date: May 1995
Publication Type(s): Case Reports English Abstract Journal Article
PubMedID: 7776757
Abstract: Two female patients with acute intermittent porphyria, who received oestrogen skin pads as supplementary treatment for postmenopausal discomfort, developed severe psychiatric disorders with persistent confusion, aggression and paranoid reactions. Some decades earlier they had reacted with symptoms of acute porphyria following oral contraceptive usage. There is well documented evidence of the advisability of restrictiveness in the use of oestrogens in conjunction with acute porphyria, particularly in cases of patients with a history of hormone-related symptoms of acute porphyria. The putative mechanisms by means of which oestrogens may exert effects on neurotransmitters and peptides are discussed in the article. The authors would be grateful to hear from colleagues abroad who have treated patients with similar symptoms following postmenopausal treatment with oestrogens.
Database: Medline

4. Transdermal estrogen replacement therapy in postmenopausal women previously treated for porphyria cutanea tarda.
Author(s): Bulaj, Z J; Franklin, M R; Phillips, J D; Miller, K L; Bergonia, H A; Ajioka, R S; Griffen, L M; Guinee, D J; Edwards, C Q; Kushner, J P
Source: The Journal of laboratory and clinical medicine; Dec 2000; vol. 136 (no. 6); p. 482-488
Publication Date: Dec 2000
Publication Type(s): Journal Article Research Support, U.s. Gov't, P.h.s.
PubMedID: 11128750
Abstract: Oral contraceptives and postmenopausal estrogen replacement therapy are recognized as risk factors for the development of porphyria cutanea tarda (PCT) in women. The recommended clinical practice is to withhold estrogen therapy in women who have had phlebotomy therapy for PCT and are clinically and biochemically normal. We tested the safety and efficacy of transdermal estrogen replacement therapy in 7 women previously treated for PCT and compared them with 19 non-porphyric control subjects treated with transdermal or oral estrogens. Gonadotrophic hormone levels, estrogen levels, liver function studies, body iron stores, urine porphyrin excretion, and cytochrome P4501A2 (CYP1A2) activity were monitored for 1 year. Four of the women previously treated for PCT completed the study. None had evidence of a porphyrinic relapse. CYP1A2 activity, measured by three different methods, did not differ between study subjects receiving estrogens, patients with active PCT, and non-porphyric control subjects, nor did CYP1A2 activity change during the study period. Gonadotrophic hormone levels fell and estrogen levels rose in all women receiving estrogens. The administration of estrogens by the transdermal route appeared to be safe in the small number of subjects we studied and should be considered for women previously treated for PCT.
Database: Medline
5. **Porphyria cutanea tarda.**

   **Author(s):** Hammerschmidt, D E  
   **Source:** The Journal of laboratory and clinical medicine; Dec 2000; vol. 136 (no. 6); p. 490  
   **Publication Date:** Dec 2000  
   **Publication Type(s):** Journal Article  
   **PubMedID:** 11128752  
   **Database:** Medline

6. **Cutaneous complications of hormonal replacement therapy.**

   **Author(s):** Mor, Z; Caspi, E  
   **Source:** Clinics in dermatology; 1997; vol. 15 (no. 1); p. 147-154  
   **Publication Date:** 1997  
   **Publication Type(s):** Journal Article Review  
   **PubMedID:** 9034663  
   **Database:** Medline

7. **A confusing case of confusion. Acute porphyrias.**

   **Author(s):** Jackson, Rhett; Toubia, Najib; Dhaliwal, Gurpreet; Bottomley, Sylvia S; Bronze, Michael S  
   **Source:** The Journal of the Oklahoma State Medical Association; Apr 2008; vol. 101 (no. 4); p. 85  
   **Publication Date:** Apr 2008  
   **Publication Type(s):** Case Reports Journal Article  
   **PubMedID:** 18557584  
   **Database:** Medline
8. Porphyria cutanea tarda with menopausal exacerbation: the possible role of menstruation as natural phlebotomy.

**Author(s):** Nishioka, Eri; Funasaka, Yoko; Bito, Toshinori; Ito, Akira; Tani, Masahiro; Kawara, Akira; Yoon, Seitetsu; Kondo, Masao; Ichihashi, Masamitsu

**Source:** Journal of the American Academy of Dermatology; Sep 2003; vol. 49 (no. 3); p. 547-550

**Publication Date:** Sep 2003

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 12963930

**Abstract:** We describe a 48-year-old woman with a 12-year history of porphyria cutanea tarda who showed a remarkable exacerbation of her eruptions accompanied by high serum levels of iron and ferritin at menopause. As iron storage is known to be a triggering factor of porphyria cutanea tarda, the possible role of menstruation as natural phlebotomy to prevent porphyria cutanea tarda exacerbation is discussed.

**Database:** Medline

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9. Acute intermittent porphyria presenting postmenopausally for the first time.

**Author(s):** Oomman, A; Sharma, R N; Vilasini, K

**Source:** The Journal of the Association of Physicians of India; Oct 1999; vol. 47 (no. 10); p. 1027-1028

**Publication Date:** Oct 1999

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 10778704

**Database:** Medline

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10. The Impact of Gonadal Hormones on the Expression of Human Neurological Disorders.

**Author(s):** Schipper, Hyman M

**Source:** Neuroendocrinology; 2016; vol. 103 (no. 5); p. 417-431

**Publication Date:** 2016

**Publication Type(s):** Journal Article Review

**PubMedID:** 26335277

Available at [Neuroendocrinology - from EBSCO (MEDLINE Complete)](http://link.ebscohost.com/)

Available at [Neuroendocrinology - from Unpaywall](http://www.unpaywall.org)

**Abstract:** The effects of gonadal steroids on neurological well-being and disease constitute a rich and rapidly expanding area of basic and clinical neuroscience. Gonadal hormones exert potent effects on monoaminergic, cholinergic and peptidergic pathways as well as neurosteroidogenesis which, in turn, impact normal brain organization and function. A spectrum of human neurological conditions are influenced by hormonal fluctuations associated with the menstrual cycle, pregnancy, the menopause and use of oral contraceptives. An appreciation of these relationships may facilitate the development of specific hormonal and anti-hormonal therapies for neurological disorders as disparate as catamenial epilepsy and acute intermittent porphyria.

**Database:** Medline
11. Porphyria Cutanea Tarda (PCT) experience in victoria, australia: A case series and literature review

Author(s): Le Q.; Ross G.; Fullinfaw R.; McGuinness M.
Source: Australasian Medical Journal; 2018; vol. 11 (no. 1); p. 54-63
Publication Date: 2018
Publication Type(s): Article
Available at Australasian Medical Journal - from Free Medical Journals . com
Available at Australasian Medical Journal - from ProQuest (Health Research Premium) - NHS Version
Available at Australasian Medical Journal - from Unpaywall

Abstract: Background Porphyria Cutanea Tarda (PCT) is a metabolic disorder resulting from a deficiency of hepatic enzyme uroporphyrinogen decarboxylase (UROD). UROD deficiency results in the accumulation of porphyrins, which are phototoxic and hepatotoxic. PCT patients are at increased risk of developing hepatocellular carcinoma. Aims We aim to describe a series of PCT patients presenting to a tertiary center over 35-year period from the 1980s to December 2015 and review current literature to date on PCT, with a focus on PCT management. Methods A search of the center’s dermatology department and biochemistry database were performed to identify patients diagnosed with PCT. Demographic data, underlying risk factors and management details were obtained. Statistical tests were performed to identify any possible association between the variables of interest. Results 34 patients were included in this study. Mean age of diagnosis was 48 years and there was no gender difference. 12 patients had Hepatitis C infection, 25 had excessive alcohol consumption, 13 had hereditary haemochromatosis. Eight patients developed oestrogen-associated or hormonal replacement therapy (HRT) induced PCT. 33 patients (97 per cent) responded to venesection. Six (18 per cent) patients were prescribed hydroxychloroquine, either alone or concurrently with venesection. They all achieved remission. Average duration of follow up is 13 years. One patient developed hepatocellular carcinoma (HCC). Conclusion Our study has reinforced venesection as an effective treatment for PCT. Low dose hydroxychloroquine can be used in patients where venesection is contraindicated or not tolerated. General measures such as alcohol abstinence, visible violet light protection and trauma avoidance are recommended. Copyright © 2018, Australasian Medical Journal Pty Ltd. All rights reserved.

Database: EMBASE
12. Making sense of the porphyrias
Author(s): Sarkany R.P.E.
Source: Photodermatology Photoimmunology and Photomedicine; Apr 2008; vol. 24 (no. 2); p. 102-108
Publication Date: Apr 2008
Publication Type(s): Article
PubMedID: 18353093
Available at Photodermatology, photoimmunology & photomedicine - from Wiley Online Library
Available at Photodermatology, photoimmunology & photomedicine - from EBSCO (MEDLINE Complete)
Abstract: Patients with cutaneous porphyrias can be worrying for dermatologists. The diseases are rare enough to be unfamiliar, are associated with internal diseases, can have genetic implications, and are associated with incomprehensible biochemical pathways. In this review, I will try to explain why porphyrias occur, why they present as they do in the clinic, and provide a checklist for treating patients with porphyria. © Journal compilation © 2008 Blackwell Munksgaard.
Database: EMBASE

13. Menopause and hormone replacement revisited
Author(s): anonymous
Source: South African Medical Journal; May 2007; vol. 97 (no. 5); p. 307
Publication Date: May 2007
Publication Type(s): Editorial
Database: EMBASE

14. Porphyria cutanea tarda induced by oestrogen therapy
Author(s): White M.I.
Source: British Journal of Urology; 1977; vol. 49 (no. 6); p. 468
Publication Date: 1977
Publication Type(s): Article
PubMedID: 588948
Database: EMBASE
15. Porphyria variegata provoked by contraceptive pill

Author(s): Fowler C.J.; Ward J.M.

Source: British Medical Journal; 1975; vol. 1 (no. 5959); p. 663-664

Publication Date: 1975

Publication Type(s): Article

PubMedID: 1125655

Available at British medical journal - from Unpaywall

Abstract: Combined oestrogen progesterone oral contraceptives are known to produce neuropsychiatric and abdominal symptoms in acute intermittent porphyria. This is thought to be due to the induction of delta aminolaevulate synthetase. The activity of this enzyme is increased in all forms of inherited porphyria, and, though this is probably not the primary biochemical lesion, oestrogens would tend to compound the existing defect. In porphyria variegata oestrogens do not apparently provoke acute attacks, but four cases have been reported in which the 'pill' produced cutaneous symptoms associated with liver damage. A further case is presented. The patient, with undiagnosed porphyria variegata, took an oral contraceptive and two months later developed a light sensitive bullous eruption followed by cholestatic jaundice. The case illustrates a probable mechanism for the photosensitivity.

Database: EMBASE

16. Evaluation of gonadotropin-releasing hormone agonist treatment for prevention of menstrual-related attacks in acute porphyria

Author(s): Innala E.; Backstrom T.; Bixo M.; Andersson C.

Source: Acta obstetricia et gynecologica Scandinavica; 2010; vol. 89 (no. 1); p. 95-100

Publication Date: 2010

Publication Type(s): Article

PubMedID: 20021268

Available at Acta obstetricia et gynecologica Scandinavica - from Wiley Online Library

Abstract: OBJECTIVE: To describe the benefits and adverse effects of gonadotropin-releasing hormone (GnRH) agonist treatment for prevention of recurrent menstrual attacks in women with acute intermittent porphyria and variegate porphyria. To describe concomitant add-back therapies with estradiol and progesterone and describe their benefits and adverse effects. DESIGN: A retrospective follow-up with questionnaires, interviews and medical records. SETTING: Out-patient care at the Umea University Hospital in Sweden. POPULATION: Sixteen Caucasian women with DNA-diagnosed porphyria and menstrual-cycle-related porphyria attacks were treated with GnRH agonists during 1984-2000. Fourteen women participated. The mean age when treatment started was 33 years (17-48 years). The duration of treatment varied between 5 months and 9 years. METHOD(S): GnRH agonists were administered by the intranasal route or by injections. To reduce menopausal symptoms, add-back therapy with low doses of estradiol was administered, and for endometrial protection progesterone was usually administered. MAIN OUTCOME MEASURES: Treatment effects and adverse events as detected in questionnaires, interviews and medical records. RESULT(S): Eleven women reported benefits from GnRH agonist treatment with less intense and/or less frequent porphyria attacks, and in four of them attacks almost disappeared. Two women reported no change. One woman had only temporary improvement. Porphyria attacks were triggered by solely estradiol add-back in two women and in five of nine women when progesterone was given. CONCLUSION(S): GnRH agonist treatment can ameliorate menstrual-cycle-related attacks of porphyria. Dose findings for GnRH agonists and add-back regimes especially for progesterone are intricate.
17. Hereditary uroporphyrinogen-decarboxylase deficiency predisposing porphyria cutanea tarda (chronic hepatic porphyria) in females after oral contraceptive medication

Author(s): Sixel-Dietrich F.; Doss M.

Source: Archives of Dermatological Research; 1985; vol. 278 (no. 1); p. 13-16

Publication Date: 1985

Publication Type(s): Article

PubMedID: 4096525

Available at Archives of dermatological research - from SpringerLink - Medicine

Abstract: Porphyria cutanea tarda (PCT) was diagnosed in 27 women aged 23-48 years (mean, 35 years) who had been under oral-hormonal-contraceptive medication for 1-18 years, in 3 women under substitutional estrogen treatment in the menopause, and in 2 men aged 65 and 76 years after estrogen treatment of prostatic carcinoma. In all patients, total urinary porphyrin excretion was elevated, with an average uro- and heptacarboxylophyrin predominance of 88%, thus proving PCT. Of the patients, 84% showed a significant decrease of erythrocyte uroporphyrinogen-decarboxylase (UD; EC 4.1.1.37) activity to ~50% of control levels suggesting a hereditary predisposition for the development of a chronic hepatic porphyria. Estrogens and alcohol are capable of reducing hepatic UD activity. Women with hereditary red cell UD deficiency may be regarded as predisposed to PCT when under estrogen intake, especially in combination with the potentiating influence of alcohol and chronic liver disease. Normal erythrocyte UD values in patients with additive alcohol consumption may implicate a stronger inhibitory effect for alcohol on UD, suggesting a merely toxic form of chronic hepatic porphyria.

Database: EMBASE

18. [Hormone replacement therapy for internal risk patients].

Author(s): Mueck, Alfred O

Source: Gynakologisch-geburthilfliche Rundschau; 2006; vol. 46 (no. 4); p. 174-190

Publication Date: 2006

Publication Type(s): Comparative Study English Abstract Journal Article Review

PubMedID: 17068402

Abstract: Using hormone replacement therapy (HRT), absolute and relative contradictions have to be considered, which are primarily classified according to a "worst case" scenario on the assumption of group effects, in order to satisfy forensic demands. However, in patients with severe complaints it make sense to apply HRT even at increased risk. To minimize the risk, a differentiated choice of the preparation especially in terms of progestin component and application mode is feasible apart from a general dose reduction. For internal risk patients, transdermal estradiol in a patch or gel and neutral progestins like progesterone and dydrogesterone or combination patches for a completely transdermal HRT are to be preferred. In the Women's Health Initiative, a study investigating a population strongly burdened with cardiovascular risks, the most important risks were venous thromboses and strokes, in old age also myocardial infarctions. In this context, the risk groups with diabetes, hypertension and dyslipoproteinemia as well as smokers in general are of particular importance. Other common internal risk groups comprise women with thyroid and hepatobiliary diseases. Rare but prognostically important diseases such as porphyria and lupus erythematosus are
considered as relative contraindications. The available data on these risk groups are described and practical recommendations are given.

**Database:** Medline

19. *Porphyria cutanea tarda associated with HFE C282Y homozygosity, iron overload, and use of a contraceptive vaginal ring.*

**Author(s):** Barton, James C; Edwards, Corwin Q

**Source:** Journal of community hospital internal medicine perspectives; 2016; vol. 6 (no. 1); p. 30380

**Publication Date:** 2016

**Publication Type(s):** Case Reports

**PubMedID:** 26908385

Available at [Journal of community hospital internal medicine perspectives](http://example.com) - from Europe PubMed Central - Open Access

Available at [Journal of community hospital internal medicine perspectives](http://example.com) - from Free Medical Journals . com

Available at [Journal of community hospital internal medicine perspectives](http://example.com) - from ProQuest (Health Research Premium) - NHS Version

Available at [Journal of community hospital internal medicine perspectives](http://example.com) - from Unpaywall

**Abstract:** Porphyria cutanea tarda (PCT) is characterized by decreased uroporphyrinogen decarboxylase activity in hepatocytes, uroporphyrin I and heptacarboxyl porphyrin III accumulation, photosensitivity dermatitis, and increased storage iron. In women, estrogen therapy, including oral contraceptives, postmenopausal hormone replacement, and tamoxifen for breast cancer treatment, is a risk factor for PCT. We report the case of a woman who presented with PCT, HFE C282Y homozygosity, and hepatic iron overload and was using a contraceptive vaginal ring containing ethinyl estradiol, an estrogen. We discuss this case in the context of characteristics of other persons with PCT, including common HFE mutations, iron overload, and estrogen exposure.

**Database:** Medline
20. Porphyria cutanea tarda: comparison of cases precipitated by alcohol and estrogens.

**Author(s):** Haberman, H F; Rosenberg, F; Menon, I A

**Source:** Canadian Medical Association Journal; Oct 1975; vol. 113 (no. 7); p. 653-655

**Publication Date:** Oct 1975

**Abstract:** A group of seven patients with porphyria cutanea tarda (PCT) precipitated by excessive alcohol consumption (A) was compared with a group of nine patients with PCT precipitated by estrogen therapy (B). Comparison was based on clinical signs, biochemical and morphologic evidence of liver disease, results of serum iron studies and response to therapy. Group A patients were men of mean age 57 years; group B patients were women of mean age 39 years who had been taking estrogen orally, either for contraception (in combination with progesterone) or as replacement therapy. Clinical signs were essentially the same in the two groups. Some patients in both groups had biochemical and morphologic evidence of liver disease. Group A patients had elevated values for serum iron and total iron-binding capacity, whereas patients in group B had normal or low values. Cessation of estrogen therapy of less than a year's duration brought about a spontaneous clinical and biochemical remission in group B patients. Otherwise, phlebotomy seemed to be the therapy of choice in both groups.

**Database:** Medline

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21. Porphyria cutanea tarda induced by estrogen therapy.

**Author(s):** Domonkos, A N

**Source:** Archives of dermatology; Aug 1970; vol. 102 (no. 2); p. 229

**Publication Date:** Aug 1970

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 5430319

**Database:** Medline

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**Author(s):** Roenigk, H H; Gottlob, M E

**Source:** Archives of dermatology; Sep 1970; vol. 102 (no. 3); p. 260-266

**Publication Date:** Sep 1970

**Publication Type(s):** Journal Article

**PubMedID:** 5456016

**Database:** Medline
23. Porphyria cutanea tarda unmasked by supratherapeutic estrogen during gender-affirming hormone therapy.

Author(s): Jackson Cullison, Stephanie R; Jedrych, Jaroslaw J; James, Alaina J

Source: JAAD case reports; Jul 2020; vol. 6 (no. 7); p. 675-678

Publication Date: Jul 2020

Publication Type(s): Case Reports

PubMedID: 32637521

Available at JAAD Case Reports - from Europe PubMed Central - Open Access
Available at JAAD Case Reports - from Unpaywall

Database: Medline

24. [Porphyria cutanea tarda. Case report].

Author(s): Hermosilla B, Nicolás; De Toro, Gonzalo; Molgó, Montserrat

Source: Revista medica de Chile; Aug 2018; vol. 146 (no. 8); p. 943-946

Publication Date: Aug 2018

Publication Type(s): Case Reports Journal Article

PubMedID: 30534876

Available at Revista medica de Chile - from Free Medical Journals . com
Available at Revista medica de Chile - from Unpaywall

Abstract: Porphyria cutanea tarda (PCT) is the most common type of porphyria: it is characterized by blistering lesions, erosions and crusts on the back of the hands, associated with photosensitivity and facial hypertrichosis. It is produced by acquired or hereditary deficiency of the enzyme UROD, fifth enzyme in the chain of production of the Heme group. This causes accumulation of porphyrins in the liver, which are subsequently mobilized to the skin, where lesions are generated by photosensitivity. This deficiency can be exacerbated by multiple causes. We report a 51-year-old female presenting with the characteristic dermal lesions described above, which disappeared when she discontinued her hormone replacement therapy with estradiol and dydrogesterone. Urinary and blood uroporphyrin and hexacarboxyl porphyrins were elevated and plasma ferritin was 479 ng/ml. Hormone replacement therapy was discontinued and phlebotomies were attempted but not tolerated by the patient. The dermic lesions have not relapsed.

Database: Medline
25. Porphyria cutanea tarda: Pregnancy versus estrogen effect

Author(s): Urbanek R.W.; Cohen D.J.
Source: Journal of the American Academy of Dermatology; 1994; vol. 31 (no. 2); p. 390-392
Publication Date: 1994
Publication Type(s): Article
PubMedID: 7913477

Abstract: We describe the worsening of porphyria cutanea tarda in a young woman while she was taking oral contraceptives. However, she did not have an exacerbation during two pregnancies. We conclude that estrogens produced during pregnancy do not exert the same effect as orally administered medications that contain estrogen. The pronounced effect of oral ethinyl estradiol on the liver may be attributed to its first-pass effect on that organ.

Database: EMBASE

26. Drug-induced cutaneous porphyria

Author(s): Ayala F.; Santoianni P.
Source: Clinics in Dermatology; 1993; vol. 11 (no. 4); p. 535-539
Publication Date: 1993
Publication Type(s): Review
PubMedID: 7907270
Database: EMBASE
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