

Acido Tranexámico en Ginecología / Obstetricia:

1. INDICACIONES EN GINECOLOGÍA Y OBSTETRICIA:

- **Tratamiento de hemorragias:**

Menorragia primaria funcional o sangrado menstrual grave o abundante (SMA) aprobado por FDA para el producto Lysteda de USA, ácido tranexámico en comprimidos, sólo para esta forma farmacéutica y esta indicación, en noviembre 2009

Menorragia inducida por DIU

Spotting inducido por terapéutica hormonal

Hemorragia post- parto

Desprendimiento de placenta (*abruptio placentae*)

- **Prevención de hemorragias:**

En cirugía de cuello de útero por SIL de alto grado vinculado a HPV (conización cervical)

En cirugías gineco/ obstétricas diversas que conllevan riesgo de hemorragia: Histerectomías, miomectomías, legrados uterinos diagnósticos, cesáreas.

2. TRABAJOS PUBLICADOS:

Role of a non-hormonal oral anti-fibrinolytic hemostatic agent (tranexamic acid) for management of patients with dysfunctional uterine bleeding.

Gultekin M, Diribaş K, Buru E, Gökçeoğlu MA: *Clin Exp Obstet Gynecol.* 2009;36(3):163-5. Department of Obstetrics and Gynecology, Cankiri Government Hospital, Cankiri, Turkey. mrtgultekin@yahoo.com

OBJECTIVE: Perimenopausal dysfunctional bleeding is a common complaint seen in gynecology clinics. Tranexamic acid is a cheap, over the counter hemostatic agent with antifibrinolytic activity that can be used for management of excessive menstrual bleeding. However, there are few reports analyzing its effectiveness in the management of abnormal menstrual bleeding. This study aimed to evaluate the effectiveness of oral

tranexamic acid treatment in patients with excessive dysfunctional perimenopausal menorrhagia.

METHOD: One hundred and thirty-two consecutive patients with dysfunctional perimenopausal uterine bleeding who were admitted to Cankiri Government Hospital between March 2007 and January 2008 were prospectively enrolled into this one-sided study. All the patients were asked to fill out menstrual diaries and to come to follow-up three months after the initial evaluation. All patients took 500 mg of tranexamic acid (Transamine 3x2) during their menses as the primary treatment and iron preparations if Hb was < 10 g/dl. The paired sample t-test was used for statistical evaluation.

RESULTS: Mean age of the patients was 42.8 (range 38-46 yrs). Median bleeding time was nine days (range 8-12 days) and median Hb was 10.6 g/dl (range 8.2-11.7) before starting the treatment. During follow-up 45 patients were unresponsive to transamine and needed further treatments (overall response rate was 65.9%). Among responsive patients, after three cycles of transamine usage median bleeding time was five days (range 3-8 days) and median Hb values were 12.1 g/dl.

CONCLUSION: Oral tranexamic acid is a reasonable treatment option for patients with excessive dysfunctional perimenopausal bleeding with a 66.0% response rate.

PMID: 19860359 [PubMed - indexed for MEDLINE]

The risk of venous thromboembolism associated with the use of tranexamic acid and other drugs used to treat menorrhagia: a case-control study using the General Practice Research Database.

Sundström A, Seaman H, Kieler H, Alfredsson L: BJOG. 2009 Jan;116(1):91-7. Epub 2008 Nov 11. Centre for Pharmacoepidemiology, Clinical Epidemiology Unit, Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden. anders.sundstrom@ki.se

OBJECTIVE: To assess whether use of tranexamic acid is associated with an increased risk of venous thromboembolism (VTE).

DESIGN: Nested case-control study.

SETTING: Database study using the General Practice Research Database for the years 1992-1998. **POPULATION:** Women aged 15-49 years with a diagnosis of menorrhagia.

METHODS: Multivariate conditional logistic regression was used to estimate the risk for VTE associated with different drug treatments for menorrhagia, adjusting for confounders. **MAIN OUTCOME MEASURES:** Adjusted odds ratios with 95% CI. **RESULTS:** A total of 134 cases of VTE and 552 matched controls were identified. Recent use of tranexamic acid was scarce, yielding an adjusted odds ratio for

VTE of 3.20 (95% CI 0.65-15.78). The use of mefenamic acid (ORadj 5.54 [95% CI 2.13-14.40]) or norethisterone (ORadj 2.41 [95% CI 1.00-5.78]) was associated with an increased risk of VTE, as was a recent--in relation to menorrhagia--diagnosis of anaemia or a haemoglobin value <11.5 g/dl (ORadj 2.23 [95% CI 1.02-4.86]).

CONCLUSIONS: We found that tranexamic acid was associated with an increased risk of VTE, although the risk estimate did not reach statistical significance. Increased risks of VTE associated with other treatments for menorrhagia were observed. The increased risk of VTE observed with a diagnosis of anaemia--a proxy for more severe menorrhagia--suggests that menorrhagia could be a prothrombotic condition. The observed association between VTE, tranexamic acid and other treatments for menorrhagia may thus partly be explained by confounding by indication. The possibility that menorrhagia is itself a risk factor for VTE merits further investigation.

PMID: 19016686 [PubMed - indexed for MEDLINE]

Treatment of idiopathic menorrhagia with tranexamic acid.

Srinil S, Jaisamrarn U: J Med Assoc Thai. 2005 Oct;88 Suppl 2:S1-6. Department of Obstetric & Gynecology, Faculty of Medicine, Chulalongkorn University, Rama IV Rd, Bangkok 10330, Thailand.

OBJECTIVE: To determine the efficacy of tranexamic acid in the treatment of idiopathic menorrhagia and to investigate the effect of medical treatment with tranexamic acid on the quality of life of the women with idiopathic menorrhagia.

DESIGN: Open, non-comparative study. SETTING: Department of Obstetrics and Gynecology King Chulalongkorn Memorial Hospital. SUBJECTS: 40 women with idiopathic menorrhagia was confirmed by menstrual blood loss greater than 80 ml/ cycle (PBAC score > 100) and mid-luteal serum progesterone concentration greater than 5 pg/ml.

INTERVENTION: Treatment with tranexamic acid 1 g orally, threemtimes daily, for five days from day 1 of the menstruation for two consecutive menstrual periods. MAIN

OUTCOME MEASURES: Menstrual blood loss was measured using the pictorial blood loss assessment chart (PBAC). Hematological assessments were made at the beginning, after the first treatment cycle and at the end of the study. Questionnaires were given to assess subjective endpoint, quality of life.

Patients were asked to report any adverse event during the study period.

RESULTS: Tranexamic acid reduces the mean PBAC score by 49%, from 350.5 to 178.6. Regarding the change in the quality of life measures, the proportion of women who

felt a considerable degree of impairment during the menstruation was reduced from nearly 60% to less than 5% during their third menstruation. No serious adverse events were reported. CONCLUSION: Tranexamic acid is a safe and effective form of medical therapy in women with menorrhagia; also increases quality of life in these women. PMID: 17722310 [PubMed - indexed for MEDLINE]

Preventive treatment of intrauterine device-induced menstrual blood loss with tranexamic acid in Chinese women.

Lin X, Gao ES, Li D, Zhang M, Dou LX, Yuan W: Acta Obstet Gynecol Scand. 2007;86(9):1126-9. Shanghai Institute of Planned Parenthood Research, Shanghai, China.

OBJECTIVES: To investigate whether tranexamic acid (Transamin) therapy reduces the amount of menstrual blood loss (MBL) and occurrence of menorrhagia after intrauterine device (IUD) insertion. METHODS: Some 175 Chinese women attending for IUD insertion were equally assigned into 2 Transamin groups (1,000 and 500 mg, twice daily) and a placebo group. Their MBL was recorded with a pictorial chart in 3 subsequent menstrual cycles after insertion, while the MBL of 64 patients, collecting used sanitary towels, was also measured by an alkaline hematin method. RESULTS: A significant decline in post-insertion MBL and occurrence of menorrhagia was found in the 2 Transamin groups compared with the placebo group ($p < 0.05$), whereas the difference in the results from the pictorial chart score was not statistically significant between the 1 g group and placebo group. CONCLUSION: Transamin treatment with a generally recommended dosage can effectively reduce the amount of IUD-induced MBL and prevent menorrhagia in Chinese women. A lower dosage than recommended (50% of recommended dosage) may have a similar preventive effect.

PMID: 17712656 [PubMed - indexed for MEDLINE]

Role of tranexamic acid in management of dysfunctional uterine bleeding in comparison with medroxyprogesterone acetate.

Kriplani A, Kulshrestha V, Agarwal N, Diwakar S: J Obstet Gynaecol. 2006 Oct;26(7):673-8. Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi, India.

Currently, tranexamic acid (TXA) is used as 4 g/day in menorrhagia. This prospective randomised study included 100 cases to assess efficacy and safety of 2 g/day TXA in dysfunctional uterine bleeding (DUB) vs cyclical 10 mg twice-daily medroxyprogesterone acetate (MPA) for 3 cycles. Follow-ups were made monthly for 3 months during therapy, then 3 months after. Mean pictorial blood loss assessment chart (PBAC) score decreased from 356.9 to 141.6 in the TXA group and from the pre-treatment 370.9 to 156.6 with MPA and mean reduction of blood loss was 60.3% with TXA and 57.7% with MPA after 3 months ($p < 0.005$ in both groups). Lack of response during treatment was seen in three patients (6.1%) TXA and in 13 patients (28.9%) with MPA ($p = 0.003$). In patients who reported 3 months after stopping the treatment, 66.7% in TXA group and 50% in MPA had recurrence of menorrhagia, ($p = 0.155$). During the 6 months study period more hysterectomies were performed in the MPA than in the TXA group (17.8% vs 4%; $p = 0.002$). We conclude that TXA in 2 g/day dosage is an effective and safe option in DUB.
PMID: 17071438 [PubMed - indexed for MEDLINE]

High dose of tranexamic acid for treatment of severe menorrhagia in patients with von Willebrand disease.

Mohri H: J Thromb Thrombolysis. 2002 Dec;14(3):255-7. Health Promotion Service, Tokai University School of Medicine Bouseidai, Isehara City 259-1193, Japan. mohrih@is.icc.u-tokai.ac.jp

Menorrhagia is one of the most important and frequent complications in women with congenital von Willebrand disease (vWD). Three cases of menorrhagia with vWD (type 1; 1 case, type 2A; 2 cases) were successfully treated with tranexamic acid at dose of 3 grams daily in four divided doses for the first 5 days of the menstrual cycle. All patients had severe menorrhagia lasted for more than 10 days with iron deficiency anemia of hemoglobin levels of 6.5-8.4 g/dl. Common dosage of tranexamic acid of 1 gram daily in 4 divided doses on days 1-5 of their menstrual cycles did not correct their menorrhagia. The treatment was then changed to the daily dose of 3 grams in 4 divided doses on days 1-5 of their menstrual cycles. Thereafter, their menorrhagia became well-controlled with improvement of their anemia up to hemoglobin of 11.5-12.4 g/dl. High dose of tranexamic acid has been administered safely in all patients for 3-5 years without significant complications. Oral high-dose administration of tranexamic acid is very convenient and useful for treatment of menorrhagia in the patients with vWD.

PMID: 12913407 [PubMed - indexed for MEDLINE]

The effect of tranexamic acid on the quality of life of women with heavy menstrual bleeding.

Winkler UH: Eur J Obstet Gynecol Reprod Biol. 2001 Dec 1;99(2):238-43.

Fruenklinik Friedrich-Ebert-krankenhaus, Friesenstrasse 11, 24531, Neumünster, Germany.

OBJECTIVE: To investigate whether medical treatment with tranexamic acid would increase the quality of life of women with heavy menstrual bleeding.

STUDY DESIGN: This open, uncontrolled usage study included 849 women diagnosed with heavy menstrual bleeding and considered eligible for tranexamic-acid treatment. The condition of the women was investigated at baseline and after the first and the third treated menstruation. Quality of life and subjectively experienced state of health were assessed with the aid of a questionnaire. Satisfaction with the treatment was registered.

RESULTS: After the third menstruation, 80% of the women were satisfied with the treatment. Impairment of social activities and impairment at work were greatly reduced by the treatment. Substantial improvements were also recorded with regard to alertness, productivity, cleanliness, spirits, action radius and overall well-being. Adverse reactions to the drug used for the treatment were few and non-serious. CONCLUSIONS: Medical treatment with tranexamic acid increases quality of life for women with heavy menstrual bleeding.

PMID: 11788179 [PubMed - indexed for MEDLINE]

Efecto del ácido tranexámico para el tratamiento del sangrado uterino irregular secundario al uso del DMPA

Senthong AJ, S. Taneapanichskul: J Med Assoc Thai. 2009 Abr; 92 (4) :461-5.

Departamento de Obstetricia y Ginecología, Facultad de Medicina, Universidad de Chulalongkorn, Bangkok, Tailandia. ajaree_s@hotmail.com

OBJETIVO: Evaluar la eficacia del ácido tranexámico y el placebo para controlar el sangrado uterino irregular en usuarios de acetato de medroxiprogesterona de depósito(DMPA).

MATERIAL Y MÉTODO: Un estudio doble ciego, controlado con placebo se realizó en 100 usuarios de DMPA que asistieron a la Clínica de Planificación Familiar Rey Chulalongkorn Memorial Hospital. Todos los usuarios han sangrado anormalmente. Ellos fueron divididos aleatoriamente en dos grupos, un grupo de 50 que recibieron ácido tranexámico, 250 mg cuatro veces al día durante 5 días y otro grupo de 49 que recibió placebo de la misma manera. El total de días de sangrado / manchado y el porcentaje de mujeres en las que la hemorragia se detuvo, se analizaron en el final de las semanas 1 y 4.

RESULTADOS: El porcentaje de sujetos en los que la hemorragia se detuvo durante la primera semana después del tratamiento inicial fue significativamente mayor en el grupo del ácido tranexámico que en el grupo placebo (88% frente a 8,2%, $p < 0,001$). Durante el periodo de seguimiento (4 semanas después del tratamiento inicial), un intervalo libre de hemorragia de > 20 días se encontró en el 68% de los sujetos tratados con ácido tranexámico y del 0% en los tratados con placebo ($p < 0,001$). El número medio de hemorragia / manchado días fueron también significativamente diferente entre los grupos ($5,7 + / - 2.5$ vs $17.5 + / - 7.2$ días, $p < 0,05$).

CONCLUSIÓN: El ácido tranexámico fue más eficaz que el placebo en el tratamiento a corto plazo del sangrado / manchado uterino irregular asociado con el uso de DMPA.