

Les médicaments issus des plantes dans le traitement des maladies hématologiques (médicaments naturels utilisés en hématologie)

Soirée d'Enseignement Post-Universitaire

« L'hématologie à Montpellier :
à l'occasion des célébrations de l'anniversaire des
800 ans de la Faculté de Médecine »



22 septembre 2020

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Définition des contours de l'exposé

- Plantes et pas champignons (monde à part)
- Champ évolutif de l'hématologie (« discipline extrêmement polymorphe » dicit futur-interne.com)
- Eviter le catalogue exhaustif (83 000 résultats PubMed), parti pris thématique, regard pharmacologique

PubMed.gov

hematology phytotherapy

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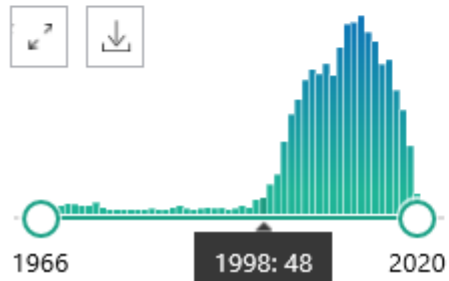
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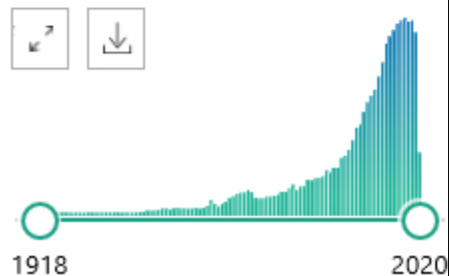
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RESULTS BY YEAR

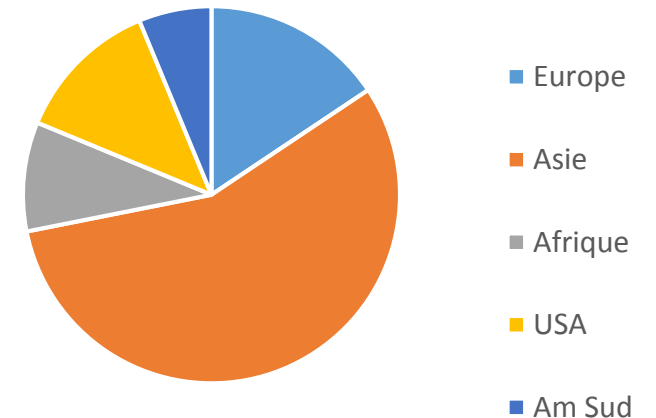


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RESULTS BY YEAR



Affiliation des publications utilisées



Evolution des mots, donc des savoirs et contours des disciplines



Stomachique - cholagogue - cholérétique - émollient - sédatif - antiprurigineux
antispasmodique - eupeptique - diurétique - sternutatoire - laxatif - purgatif
dépuratif - décongestionnant - carminatif - stimulant - expectorant - antiseptique
aphrodisiaque - apéritif - diaphorétique/sudorifique

Antiviral, antifongique, anti-inflammatoire, antioxydant

Emménagogue : gynécologie

Vulnéraire : médecine d'urgence

Astringent : hématologie

Hémostatique : hématologie

Veinotonique, phlébotonique : angiologue, neurologue, proctologue

Dépuratif ?



Review: Southern African medicinal plants used as blood purifiers

S. van Vuuren*, L. Frank

Table 5
Blood purifier plants linked to a spiritual use.

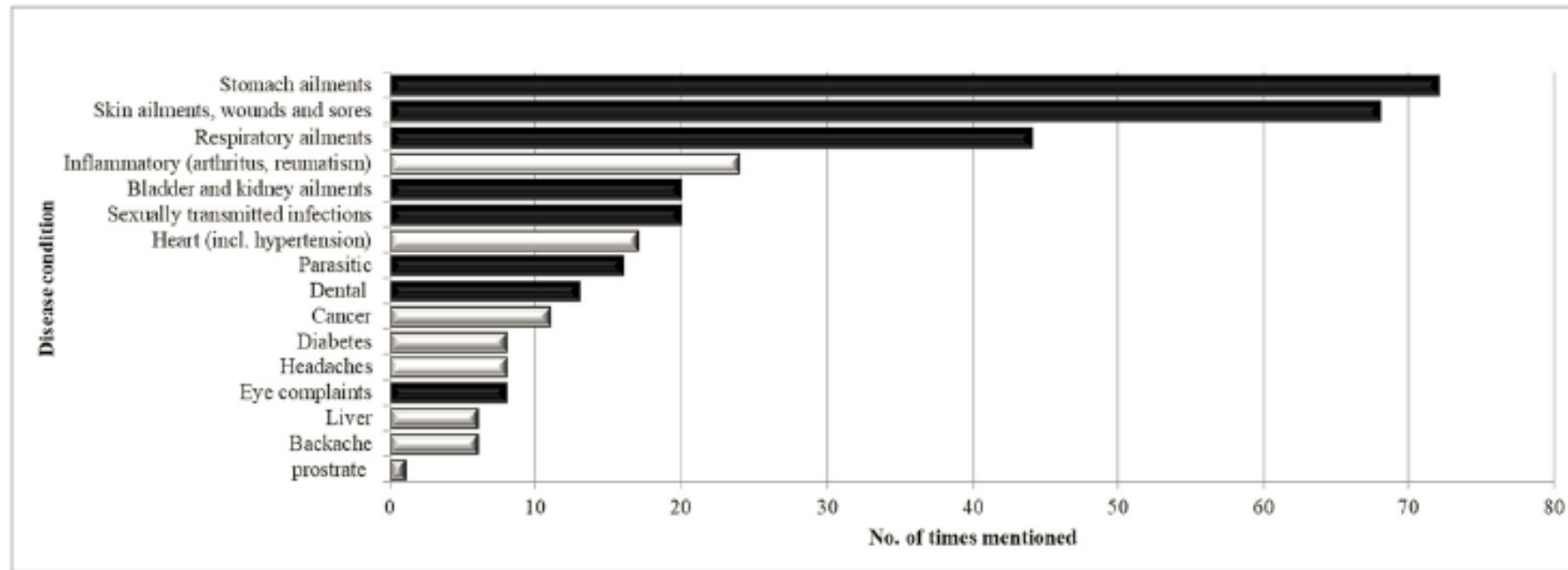


Fig. 2. Incidence of disease conditions mentioned with plant species associated with blood purification (■ plant species that may be associated with an infectious disease; □ plant species associated with non-infectious conditions).

Amulet for court cases (Philander, 2011)

A decoction of the leaf: astringent and carminative (Watt and Breyer-Brandwijk, 1962)

Root and leaves (decoction): strengtheners, sexual stimulants (Hutchings, 1996)

Intestinal parasites introduced by witchcraft (Watt and Breyer-Brandwijk, 1962)

159 plantes étudiées - notion holistique

Table 1

Medical conditions linked to the need for a blood purifier.

Medical condition	Reference
Acne, abscesses, pimples and other skin complaints	Watt and Breyer-Brandwijk (1962); Naveen (2011); Shankar (2011); Chauhan (2013)
Anemia	Acharya et al. (2011); Shankar (2011); Olivier (2012)
Bad circulation	Chauhan (2013)

Des mots désuets, des savoirs désuets ?

Scientific evaluation of medicinal plants used for the treatment of abnormal uterine bleeding by Avicenna

Masumeh Mobli · Marzieh Qaraaty ·
Gholamreza Amin · Ismaeil Haririan ·
Mannan Hajimahmoodi · Roja Rahimi

Arch Gynecol Obstet (2015) 292:21–35

IF 1.49

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Table 1 Medicinal plants used for treatment of AUB mentioned in “Canon of Medicine”

Scientific names	Family	Name(s) in “Canon of Medicine” book
<i>Boswellia sacra</i> Flueck.	Burseraceae	Kondur
<i>Cerantonia siliqua</i> L.	Fabaceae	Kharnub
<i>Cuscutachinensis</i> Lam.	Convolvulaceae	Kashus
<i>Cydonia oblonga</i> Mill.	Rosaceae	Safarjal
<i>Cymbopogon schoenanthus</i> (L.) Spreng.	Poaceae	Izkher
<i>Hyoscyamus</i> sp.	Solanaceae	Banj
<i>Juglansregia</i> L.	Juglandaceae	Juz
<i>Lens culinaris</i> Medik.	Fabaceae	Adas
<i>Myrtus communis</i> L.	Myrtaceae	Aas
<i>Nymphaea alba</i> L.	Nymphaeaceae	Ni lufar
<i>Oleae uropaea</i> L.	Oleaceae	Zeitun
<i>Onopordum acanthium</i> L.	Asteraceae	Shukaei
<i>Paeonia officinalis</i> L.	Paeoniaceae	Ood-al- Saleeb, Favania
<i>Paeonia emodi</i> Wall. ex Royle		
<i>Pistacia lentiscus</i> L.	Anacardiaceae	Mastaki
<i>Polygonum aviculare</i> L.	Polygonaceae	Asi-al-raei
<i>Portulaca oleracea</i> L.	Portulacaceae	Boghla-al-homgha
<i>Punica granatum</i> L.	Lythraceae	Jolnar
<i>Rhus coriaria</i> L.	Anacardiaceae	Somagh
<i>Rumex acetosa</i> L.	Polygonaceae	Hommaz
<i>Solanum nigrum</i> L.	Solanaceae	Enab-al-saalab
<i>Symphytum</i> sp.	Boraginaceae	Samghuton
<i>Tragopogon</i> sp.	Asteraceae	Lahyat-al-tis
<i>Ziziphus spina-christi</i> (L.) Willd.	Rhamnaceae	Sedr

Ménorragie / hyperménorrhée

Physiopathologie :

Déséquilibre sécrétion endométriale PGE2/PGF2alpha vasoconstrictrice

Etat fibrinolytique local

Traitement médical :

AINS (acide méfénamique), risques digestifs

DIU levonorgestrel

Acide tranexamique, souhait grossesse, risque digestifs, rares thromboemboliques

Oestro-progestatifs, risque thromboembolique, myocardique, cancer du sein



Myrtus communis, Myrtaceae (fruit)



Myrtucommulone (acyl phloroglucinol) inh COX1 et lipooxygénase et synthèse PGE2 (feuille)

Extraits parties aériennes : antincocceptif et anti-inflammatoire

Qaraaty et al. DARU Journal of Pharmaceutical Sciences 2014, 22:45

Effect of myrtle fruit syrup on abnormal uterine bleeding: a randomized double-blind, placebo-controlled pilot study

Marzieh Qaraaty¹, Seyed Hamid Kamali^{2*}, Fataneh Hashem Dabaghian³, Nafiseh Zafarghandi^{4*}, Roshanak Mokaberinejad⁵, Masumeh Mobli⁶, Gholamreza Amin⁶, Mohsen Naseri¹, Mohammad Kamalinejad⁷, Mohsen Amin⁸, Azizeh Ghaseminejad⁹, Seyedeh jihan HosseiniKhabiri¹⁰ and Daryush Talei¹¹

Sirop des fruits 5 ml x 3 / j, 7 jours, 3 cycles, N=35 , 41 ans

- ✓ Réductions significatives de la durée des saignements, du nombre de tampons et élévation du score de qualité de vie
- ✓ Pas d'effets indésirables rapportés
- ✓ Pas de suivi après l'essai

Baie :

Tanins (acide gallique) styptiques

Anthocyanes anti-inflammatoires (inh PGH endoperoxyde synthase 1 et 2)

Flavonoïdes anti-inflammatoires dont inh iNOX et COX-2

Portulaca oleracea, Portulacaceae

Extraits parties aériennes :

- activité oestrogéniques chez le rat,
- cicatrisante chez la souris,
- antalgique et anti-inflammatoire uniquement IP chez le rat,
- antiproliférative sur carcinome cervical in vitro et chez la souris (polysaccharides)



PHYTOTHERAPY RESEARCH
Phytother. Res. 23, 1411–1414 (2009)
Published online 9 March 2009 in Wiley InterScience
(www.interscience.wiley.com) DOI: 10.1002/ptr.2790

***Portulaca oleracea* L. in the Treatment of Patients with Abnormal Uterine Bleeding: A Pilot Clinical Trial**

S. F. Shobeiri¹, S. Sharei², A. Heidari^{3*} and S. Kianbakht⁴

Poudre de graines 5g /4h, 3 jours, N=10, 45 ans

- ✓ Réductions déclaratives de la durée et des volumes des saignements chez 80% des traitées, 20% sans effet
- ✓ Pas d'effets indésirables rapportés
- ✓ Suivi 3 mois : pas de récurrence chez les répondeuses

Punica granatum, Punicaceae :

Fruit : polyphénols anti-inflammatoires inh. PGE2 et NO

Fleurs : extraits antispasmodiques et utérorelaxant chez le rat

Feuilles : glucopyranoside bloque NF- κ B d'où inh. expression molécules d'adhésion induite par TNFa

Pas d'essai clinique



RESEARCH ARTICLE

Herbal remedies affecting coagulation: A review

Werner Cordier and Vanessa Steenkamp

Department of Pharmacology, School of Medicine, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa

Données essentiellement *in vitro*

Table 1. Herbal remedies affecting coagulation.

Family	Plant	Vernacular name (uses if stated)	Effect (phytochemical if stated)	References
<i>Antithrombin activity</i>				
Apiaceae	<i>Angelica sinensis</i> (Oliv.) Diels	Dong quai (menstrual symptoms)	Antithrombin activity ^a (coumarins suggested)	Page & Lawrence, 1999; Campos-Toimil et al., 2002; Basila & Yuan, 2005
Araliaceae	<i>Hedera helix</i> L.	Common ivy	Antithrombin activity ^a	de Medeiros et al., 2000
	<i>Tetrapanax papyriferus</i> C. Koch	Rice paper plant	Antithrombin activity ^a	Chistokhodova et al., 2002
Asteraceae	<i>Bidens tripartita</i> L.	Three-lobed beggarticks	Antithrombin activity ^a	Goun et al., 2002
Monostromataceae	<i>Monostroma latissimum</i> (Keutzing) Wittrock	Kelp	Increased aPTT and TT ^a (sulfated polysaccharides)	Mao et al., 2009
Euphorbiaceae	<i>Croton zambesicus</i> Müell Arg.	Tondibonhamey (menstrual pain)	Decreased thrombin activity ^a (diterpenes suggested)	Robert et al., 2010
	<i>Jatropha curcas</i> Linn.	Physic nut (abortifacient, haemostatic)	Procoagulant when concentrated, anticoagulant when diluted ^a	Osoniyi & Onajobi, 2003
Fabaceae	<i>Cassia petersiana</i> Belle.	Dwarf cassia	Increased PT ^a	Cordier et al., 2011
Fagaceae	<i>Quercus robur</i> L.	English oak	Antithrombin activity ^a	Goun et al., 2002

Table 1. (Continued)

Family	Plant	Vernacular name (uses if stated)	Effect (phytochemical if stated)	References
<i>Antiplatelet activity</i>				
Agavaceae	<i>Yucca schidigera</i> Roezl.	Mohave yucca	Decreased platelet aggregation and lipid peroxidation ^a (polyphenols and resveratrol)	Olas et al., 2002
Anacardiaceae	<i>Rhus verniciflua</i> Stokes	Lacquer tree (promoting blood flow, removing blood stasis)	Decreased platelet aggregation, calcium mobilization, PAC-1 and P-selectin membrane-receptor expression ^a and thrombotic-induced death/paralysis ^b (isomaltol and pentagalloyl glucose)	Jeon et al., 2006
Apiaceae	<i>Petroselinum crispum</i> L.	Parsley (arterial hypertension, cardiac diseases)	Decreased platelet aggregation ^{ab} , increased tail bleeding time ^b (polyphenols suggested)	Mekhfi et al., 2004; Gadi et al., 2009
Arecaceae	<i>Calamus quiqusetinervius</i> Burret.	Rattan palm (hypertension)	Decreased collagen-induced platelet aggregation ^a (quiquelignan B, C, D, F and H)	Chang et al., 2010
Asteraceae	<i>Achillea falcata</i> L.	Yarrow (haemorrhagia)	Antiplatelet activity ^a (1,8-cineole, <i>p</i> -cymene or β -thujone suggested)	Aburjai & Hudaib, 2006
	<i>Artemisia dracunculus</i> L.	Tarragon (anticoagulant)	Decreased platelet adhesion, protein secretion ^a (polyphenols suggested)	Shahriyary & Yazdanparast, 2007
Cistaceae	<i>Solidago chilensis</i> Meyen	Goldenrod (anti-inflammatory)	Decreased platelet aggregation ^a	Rafael et al., 2009
	<i>Cistus ladaniferus</i> L.	Gum rockrose (antioxidant)	Decreased platelet aggregation ^a (polyphenols suggested)	Mekhfi et al., 2004
Clavicipitaceae	<i>Beauveria bassiana</i> (Bals.-Criv) Vuill.	White muscardine	Decreased platelet aggregation ^a (bassiatin)	Kagamizono et al., 1995
Equisetaceae	<i>Equisetum arvense</i> L.	Field horsetail (haemostatic)	Decreased platelet aggregation ^a (polyphenols suggested)	Mekhfi et al., 2004

Table 1. (Continued)

Family	Plant	Vernacular name (uses if stated)	Effect (phytochemical if stated)	References
<i>Antithrombotic and antiplatelet activity</i>				
Alliaceae	<i>Allium sativum</i> L.	Garlic (cardiovascular conditions)	Anticoagulant activity, decreased platelet aggregation ^a (allicin,	Srivastava, 1986; Rose et al., 1990; Basila & Yuan, 2005; Beckert et al.,
Araliaceae	<i>Panax ginseng</i> C.A. Meyer	Korean ginseng	Decreased platelet aggregation, increased TT ^b (saponins and ginsenosides suggested)	Basila & Yuan, 2005; Beckert et al., 2007; Lau et al., 2009
	<i>Panax notoginseng</i> (Burk) F.H.Chen	Sangi (haemostatic, cardiovascular diseases)	Decreased platelet aggregation ^{a,b} , increased coagulation times ^a , bleeding ^b (saponins and ginsenosides suggested)	Su et al., 1996; Liao & Li, 1997; Yao et al., 2008; Lau et al., 2009
	<i>Panax quinquefolium</i> Linn	American ginseng	Decreased platelet aggregation, adhesion, increased TT, platelet fluidity ^a	Basila & Yuan, 2005; Lau et al., 2009
Fabaceae	<i>Glycyrrhiza glabra</i> L.	Licorice	Direct antithrombin activity on exosite 1 ^a , increased bleeding effect, decreased thrombus size, platelet aggregation ^b (glycyrrhizin suggested)	Francishetti et al., 1997; Goun et al., 2002; Mendes-Silva et al., 2003
<i>Staunching activity</i>				
Formulation containing	<i>Panax notoginseng</i> (Burk) F.H.Chen	Yunnan Baiyao (wound healing)	-	Pan et al., 2006
Formulation consisting of Lamiaceae, Fabaceae, Vitaceae, Zingiberaceae and Urticaceae	<i>Thymus vulgaris</i> L., <i>Glycyrrhiza glabra</i> , <i>Vitis vinifera</i> L., <i>Alpinia officinarum</i> Hance, <i>Urtica dioica</i>	Ankaferd Blood Stopper® (wound healing)	Reduced bleeding time and volume ^b	Goker et al., 2008

Table 2. Herbal remedies which have been reported to adversely affect clotting.

Plant vernacular	Patient	Herbal usage			Incidence	Comments
		Dosage	Duration	Procedure/medication		
<i>Ginkgo biloba</i>	65 (M)	NS	NS	Hip arthroplasty	Postoperative wound hemorrhage	—
	61 (M)	40 mg (3-4× daily)	6 months	Spontaneous	Subarachnoid hemorrhage	No other causes found
	72 (F)	50 mg (3× daily)	NS	Spontaneous	Subdural hematoma	No other causes found
	33 (F)	120 mg (daily)	2 years	Spontaneous	Bilateral hematomas	Prolonged bleeding time, normalized after cessation of herbal
	56 (M)	40 mg (3× daily)	18 months	Spontaneous	Intracerebral hemorrhage	No other causes found
	34 (M)	2 tablets (daily)	NS	Laparoscopic cholecystectomy	Persistent hemorrhage from gall bladder	Transfusion required
	70 (M)	40 mg (2× daily)	NS	Spontaneous, 325 mg aspirin daily	Hyphema	Appeared within 1 week of starting herbal
	78 (F)	NS	NS	Stable warfarin usage	Intracerebral hemorrhage	Appeared within 2 months of concomitant herbal usage
	77 (F)	120 mg (daily)	NS	Hip arthroplasty, aspirin usage (ceased 10th day postoperation)	Persistent bloody drainage from wound (over 3 weeks)	Only reported aspirin usage initially, bleeding ceased after cessation of herbal
	73 (M)	NS	6 months	Minor trauma and bleeding tendencies	Hemorrhoidal bleeding, ecchymosis	Bleeding gradually stopped after cessation of herbal
Garlic	87 (M)	2 g (daily)	NS	Spontaneous	Epidural hematoma	Elevated bleeding time, normalized 3 days after herbal cessation
	72 (M)	NS	NS	Transfusion after transurethral prostate reaction	Bleeding	Impaired platelet function 3 months after starting herbal again
	32 (F)	Heavy usage	NS	Breast augmentation	Hematoma	Prolonged bleeding time, normalized 1 week after herbal cessation
Ginseng	72 (F)	200 mg (daily)	1 month	Spontaneous	Vaginal bleeding	—
	44 (F)	Face cream	NS	Spontaneous	Vaginal bleeding	—
	39 (F)	Oral and topical	NS	Spontaneous	Menometrorrhagia	Stopped 10 days after herbal cessation
Danshen	62 (M)	NS	2 weeks	Mitral valve replacement, stable warfarin usage (5 mg)	Chest pain, dyspnea, fatigue, pericardial, and right pleural fluid collections	INR > 8.4, aPTT > 120 s

NS, not stated; M, male; F, female. Table comprised Izzat et al. (1998), Bent et al. (2005), and Beckert et al. (2007).

Sauge chinoise

Hémostase

Phytothérapie commercialisée en pharmacie en France
« Médicament traditionnel » AMM, Visa

Achillée millefeuille, **bourse à pasteur**, potentille

La plante des épistaxis est la « feuille de ronce » (Rubus fruticosus, Rosaceae)

Hémorroïdes

Pour dompter la douleur, l'inflammation et l'œdème : 600 mg de **fragon** par jour, ou 150 gouttes d'intrait de **marron d'Inde** en 3 prises pendant 8 jours.

...

puis continuer avec des gélules (ou tisanes) de **vigne rouge**, **hamamélis**, **cyprès**, **marronnier** (écorce), à la même posologie.

...

Passiflore, **bouillon-blanc**, **gingembre**, **ginkgo**, **lierre grimpant** ou **solidage** sont parfois proposés

Bourse à Pasteur

Capsella bursa-pastoris, Brassicaceae
Shepherd's purse



Constituants :

Tanins (maillage, anti-plasmine, anti-Xa)

Flavonoïdes

Calcium

Vitamine K

Fer

Choline, acétylcholine, stérols

Allégations :

Contraction des muscles lisses utérins

Astringent, anti-oxydant, anti-inflammatoire

Utilisé par voie orale dans les saignements utérins importants ou intermenstruels

Dong, H et al.

“Effects of tannins from Geum japonicum on the catalytic activity of thrombin and factor Xa of blood coagulation cascade.”

Journal of natural products vol. 61,11 (1998): 1356-60.

Effect of Hydroalcoholic Extract of *Capsella bursa pastoris* on Early Postpartum Hemorrhage: A Clinical Trial Study Plante entière

Etude iranienne
 Simple aveugle randomisé
 Placebo N=50+50,
 Décours expulsion placenta
 10 gouttes sublinguale (500mg, 5g plante) extrait
 vs placebo, + ocytocyne

TABLE 2. COMPARISON OF MEAN BLOOD LOSS IN THE TWO GROUPS

Variable	<i>Capsella group</i> (n = 50)	<i>Control group</i> (n = 50)	Result
	Mean (SD)	Mean (SD)	p
Blood loss in the first hour (mL)	36.56 (13.74)	52.66 (20.66)	<0.0001 ^a
Blood loss in the second hour (mL)	25.6 (16.98)	34.80 (14.74)	<0.0001 ^b
Blood loss in the third hour (mL)	15.18 (11.71)	24.40 (14.02)	<0.0001 ^b
The total volume of blood loss (mL)	76.94 (29.1)	112.46 (39.64)	<0.0001 ^b

^at test.

^bMann–Witney test.

TABLE 3. COMPARISON OF HEMOGLOBIN AND HEMATOCRIT LEVELS BEFORE AND AFTER THE INTERVENTION IN THE TWO GROUPS

Variable	Groups	<i>Capsella group</i>	<i>Control group</i>	p
		(n = 50)	(n = 50)	
Before	HCT (%)	39.08 ± 1.34	38.81 ± 1.55	0.347 ^a
	Hb (g/L)	12.5 ± 0.625	12.72 ± 0.571	0.179 ^a
After	HCT (%)	37.34 ± 1.68	36.10 ± 1.48	<0.0001 ^b
	Hb (g/L)	11.71 ± 0.680	11.29 ± 0.713	0.004 ^a

^aThe t test.

^bMann–Whitney’s test.

Etude iranienne

Triple aveugle randomisé

Placebo N=42+42

1^{er} jour règles pendant 7 jours, 2 cycles

2 capsules (2x320mg, amidon) /12h vs placebo,
 + 500 mg x 2 /j acide méfénamique

#50% effets indésirables digestifs, 2 groupes

Effect of Hydroalcoholic Extracts of *Capsella Bursa-Pastoris* on Heavy Menstrual Bleeding: A Randomized Clinical Trial

Mahdis Naafe, MSc
 Nasim Khademi, M

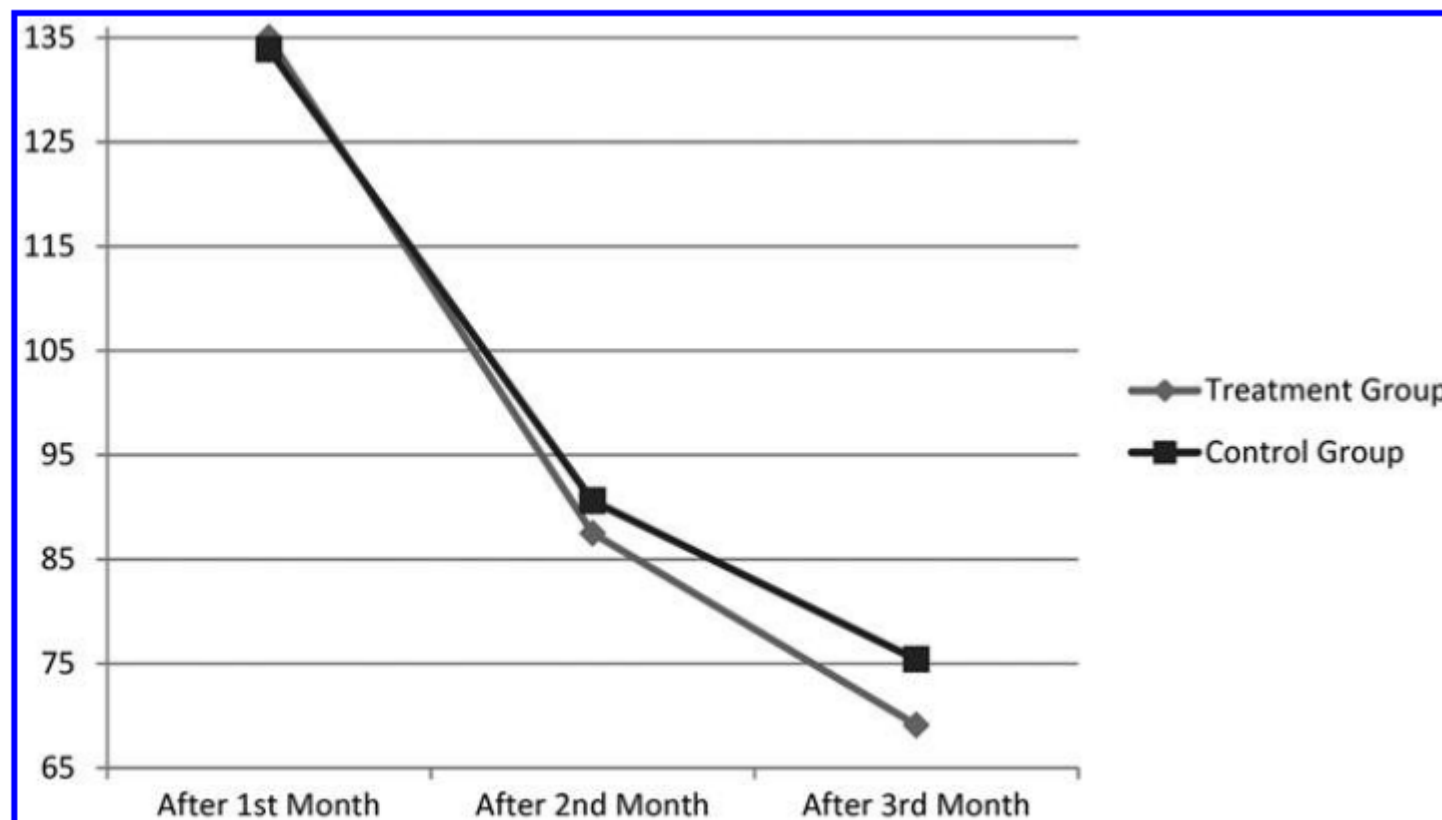
TABLE 1
 GROUPS
 STAT

Background
 variables

BMI category
 Normal ()
 Overweig

FIG. 2. Comparison of PBLAC score of menstrual bleeding between the experimental and control groups before the treatment and in the first and second courses of the treatment. PBLAC, pictorial blood loss assessment chart.

Taux de satisfaction supérieure dans le groupe traitement (91% vs 62%)



Hémostase

Ankaferd blood stopper (ABS)



Anka

Mélange traditionnel de l'Anatolie

Thymus vulgaris, Lamiaceae

Glycyrrhiza glabra, Fabaceae

Vitis vinifera, Ampelidaceae

Alpina officinarum, Zingiberaceae

Urtica dioica, Urticaceae

0,1 à 10 mg selon la forme

Autorisé en Turquie

Hôpital

Ambulances

Hémostatique chirurgical et traumatique



Feuille
sèche



Racine
sèche



Beyazit, Yavuz et al.

“Evaluation of hemostatic effects of Ankaferd as an alternative medicine.”

Alternative medicine review : a journal of clinical therapeutic vol. 15,4 (2010): 329-36.

Hémostase

Mécanisme d'action proposé :

Spectrine et ankyrine requises au niveau membrane du globule rouge

Upregulation du système de transcription GATA/FOG

Urotensine II : vasoconstrictrice

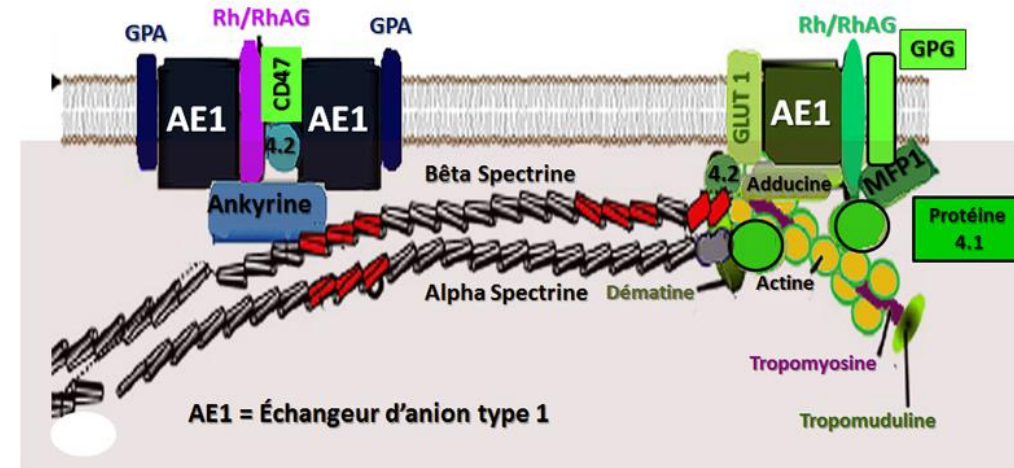
Lien entre endothélium lésé, protéines d'adhésion et l'érythrocyte activé
Apparition de phosphatidylsérine externe : X/Xa

Indépendance vis-à-vis des facteurs de la coagulation

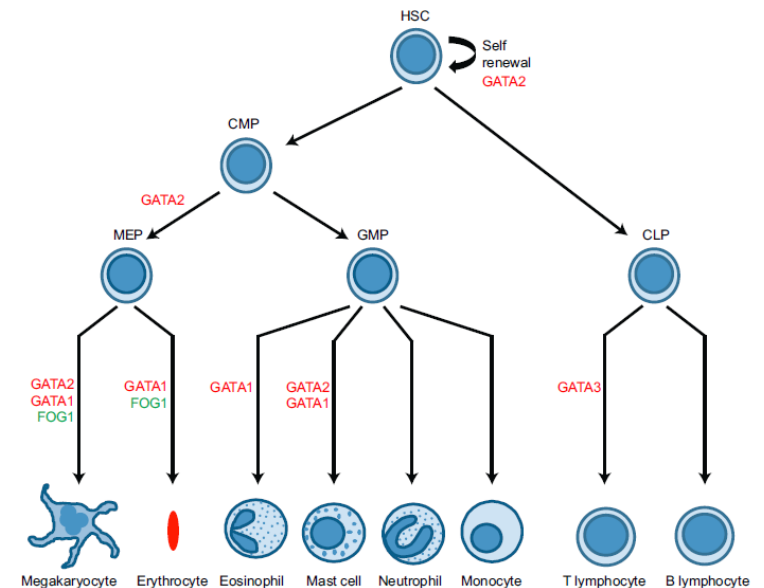
Rôle d'agglutination des protéines ?

Alternative Medicine Review Volume 15, Number 4

Relation Spectrines et phospholipides membranaires



Selon Boguslawska et al., *Cell Mol Biol Lett.* 2014 Mar;19(1):158-79



Hémostase


3 essais cliniques à l'origine de l'autorisation du ministère turc de la santé :

- ✓ Saignements lors de la mise en place d'un abord vasculaire
- ✓ Epistaxis antérieure
- ✓ Hémorragies en post-amygdalectomie

Utilisable en cas de troubles de l'hémostase

[Alternative Medicine Review](#) Volume 15, Number 4

Ankaferd blood stopper as a new strategy to avoid early complications after transradial procedures: A randomized clinical trial

Sevket Gorgulu MD  | Tugrul Norgaz MD | Ilke Sipahi MD

630 patients
3 groupes

Critère de jugement RAO à l'hémostase, 24h, 30j

Description des pratiques dans chaque groupe peu claire (temps de contention)

Background: We planned a three arm randomized study to evaluate the safety and efficacy of a new blood stopper, Ankaferd blood stopper (ABS) along with short-time compression, compared to either short-time compression with conventional sterile gauzes (CSG) or with a TR band after transradial (TRA) procedures.

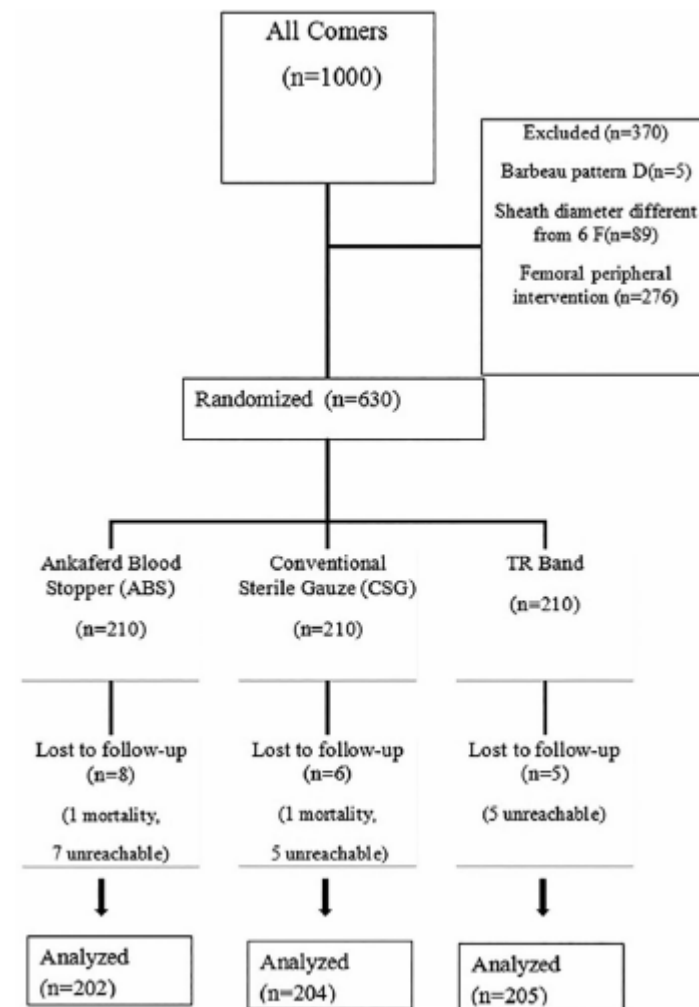
Methods: The Ankaferd blood stopper as a new strategy to avoid early complications. After transradial procedures (ABS transradial) trial is designed in a prospective, randomized, placebo-controlled fashion and registered with <http://clinicaltrials.gov> (NCT02982733). Six hundred and thirty patients were randomized into three arms in a 1:1:1 fashion corresponding to three different strategies of patent hemostasis techniques after diagnostic or interventional catheterization.

Results: One (0.49%) patient in the CSG group and one patient (0.48%) in the TR Band group developed RAO at the end of the hemostasis, compared with 0 (0%) in the ABS group. At 30 days follow-up none of the groups had any patients with RAO. As a secondary end-points the difference was not statistically significant regarding hematoma among the three groups ($P = 0.70$). Bleeding during deflation of the TR Band or removal of the elastic bandage occurred in 55 patients (26.96%) in the CSG group and in 56 (27.31%) patients in the TR Band group compared to 19 patients (9.40%) in the ABS group ($P < 0.001$).

Conclusion: Ankaferd blood stopper is a promising device for use in patent hemostasis, with no evidence on RAO at short-term or long term and with reduced risk of re-bleeding at the end of hemostasis.

KEYWORDS

Ankaferd, patent hemostasis, radial artery occlusion



Kurt M, Disibeyaz S, Akdogan M, et al. Endoscopic application of Ankaferd Blood Stopper as a novel experimental treatment modality for upper gastrointestinal bleeding: a case report. *Am J Gastroenterol* 2008;103:2156-2158.

Arslan S, Oz B, Haznedaroglu IC, Goker H. Endobronchial application of Ankaferd Blood Stopper to control profuse lung bleeding leading to hypoxemia and hemodynamic instability. *Respir Med CME* 2009;2:144-146.

Et bien plus encore...

Canatan D, Savaş Ç, Kubulu AE, et al. RFVIIA and Ankaferd use in a hemophilia patient with inhibitor [abstract]. 34th National Congress of Haematology. İzmir, Turkey; 2008: Abstract B056.

36. Akkoc N, Akcelik M, Haznedaroglu I, et al. *In vitro* anti-bacterial activities of Ankaferd Blood Stopper. *Int J Lab Hematol* 2008;30:95.
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38. İşler SC, Demircan S, Cakarar S, et al. Effects of folk medicinal plant extract Ankaferd Blood Stopper on early bone healing. *J Appl Oral Sci* 2010;18:409-414.

Padma 28 for intermittent claudication (Review)

Stewart M, Morling JR, Maxwell H

Cochrane Database of Systematic Reviews 2016, Issue 3. Art. No.: CD007371.



Mélange de 20 composés issu de la médecine tibétaine

Un comprimé de PADMA 28 contient : Bois de santal rouge 30 mg, D-camphre 4 mg, clou de girofle 12 mg, fleur de souci 5 mg, fruit de cardamome 30 mg, fruit du margosier 35 mg, fruit du myrobalan 30 mg, genre de gingembre 10 mg, genre de limon 20 mg, genre de mauve 10 mg, gypse nat. 20 mg, herbe d'ancolie 15 mg, herbe de la renouée des oiseaux 15 mg, herbe de plantain 15 mg, herbe de potentille 15 mg, laitue 6 mg, lichen d'Islande 40 mg, piment 25 mg, racine de réglisse 15 mg, racine de sarriette indienne 40 mg, racine de valériane 10 mg, tubercule d'aconit 1 mg.

Padma 28 for intermittent claudication (Review)

- 5 essais, 365 patients, > 16 semaines de suivi
- Gain significatif sur la distance maximale de marche sans douleur dans le groupe traité
- Gain calculé vs placebo 96 m
- Pas de données sur l'amélioration de la qualité de vie
- Pas d'effet sur l'index de pression systolique
- Pas de différences sur l'inconfort intestinal, la fatigue ou les éruptions cutanées
- Effet long terme ?
- Données trop limitées pour conclure

Nat Prod Res. 2011 Dec;25(20):1902-7. doi: 10.1080/14786419.2010.490785. Epub 2011 Nov 1.

Antihemorrhagic potentials of *Fagonia cretica* against *Naja naja karachiensis* (black Pakistan cobra) venom

Muhammad Tahir Razi ¹, Muhammad Hassam Hassan Bin Asad, Taous Khan, Muhammad Zabta Chaudhary, Muhammad Tayyab Ansari, Muhammad Anwar Arshad, Qazi Najam-us Saqib



Fagonia cretica, Zygophyllaceae

Feuilles et rameaux

Usage traditionnel

In vitro

Comparé au serum anti-venin et autres plantes

Non infériorité





Research Paper

Plants used to treat snakebites in Santarém, western Pará, Brazil: An assessment of their effectiveness in inhibiting hemorrhagic activity induced by *Bothrops jararaca* venom

Valéria Mourão de M
Juliana Divina Almeida
Milton Nascimento da

^a Programa de Pós-Graduação em Rec
Universidade Federal do Oeste do Par
^b Programa Multi-Institucional de Pós
Instituto de Ciências Biológicas, Unive
^c Programa de Pós-Graduação em Qui

Table 4

Inhibition by aqueous extracts of hemorrhage induced by *Bothrops jararaca* venom.

Groups	Diameter of the hemorrhagic lesion (mm) ^m		Inhibition of hemorrhage (%) ^m	
	1:12 (w/w)	1:48 (w/w)	1:12 (w/w)	1:48 (w/w)
<i>Bothrops jararaca</i> + saline	10.21 ± 0.13	10.21 ± 0.13	–	–
<i>Bellucia dichotoma</i> + <i>Bothrops jararaca</i>	0	0	100*	100*
<i>Aniba fragrans</i> + <i>Bothrops jararaca</i>	8.07 ± 0.25	4.21 ± 0.04	21 ± 2*	59 ± 0.4*
<i>Annona montana</i> + <i>Bothrops jararaca</i>	9.64 ± 0.09	9.65 ± 0.29	5.6 ± 0.9	5.5 ± 2
<i>Connarus favosus</i> + <i>Bothrops jararaca</i>	0	0	100*	100*
<i>Justicia pectoralis</i> + <i>Bothrops jararaca</i>	9.37 ± 0.08	8.14 ± 0.16	8.2 ± 0.8	20.3*
<i>Plathymenia reticulata</i> + <i>Bothrops jararaca</i>	0	0	100*	100*
<i>Philodendron megalophyllum</i> + <i>Bothrops jararaca</i>	0	0	100*	100*
<i>Cassia fistula</i> + <i>Bothrops jararaca</i>	8.89 ± 0.11	8.07 ± 0.14	12.9 ± 1*	20.9 ± 1*
<i>Libidibia ferrea</i> + <i>Bothrops jararaca</i>	9.53 ± 0.03	9.26 ± 0.10	6.6 ± 0.3	9.3 ± 1
<i>Crataeva benthamii</i> + <i>Bothrops jararaca</i>	10.12 ± 0.25	10.21 ± 0.33	0.8 ± 2	0
<i>Kalanchoe brasiliensis</i> + <i>Bothrops jararaca</i>	6.08 ± 0.29	4.39 ± 0.06	40.5 ± 2.8*	57 ± 0.6*
<i>Dipteryx odorata</i> + <i>Bothrops jararaca</i>	10.09 ± 0.20	10.19 ± 0.40	1.7 ± 2	0.2 ± 4

Table 1

Plants used by res

Plant no.	Comm
1	Açaí
2	Algodão
3	Amor
4	Araticu
5	Canafis
6	Cataua

^m Values are given as mean ± SD, n=4 per group.

Dunnett's test.

The venom and extract were preincubated for 30 min at 37 °C at venom-to-extract ratios of 1:12 and 1:48.

* $p < 0.05$ vs. control (*Bothrops jararaca* venom).

<i>Kalanchoe brasiliensis</i>	1.83 ± 0.14	1.86 ± 0.01	< LQ ^a	< LQ ^a	2.23 ± 0.48
<i>Dipteryx odorata</i>	2.48 ± 0.15	1.59 ± 0.19	1.24 ± 0.24	< LQ ^a	< LQ ^a

Results expressed in g per 100 g, dry basis. Mean ± standard deviation (n=3).

^a Concentration below the quantification limit of the method (0.03 mg/mL).

Stratégie de recherche de médicaments à partir du savoir traditionnel

Table 2

Phytochemical analysis of aqueous extracts of the 12 species selected. **Bd** (*Bellucia dichotoma*- bark), **Af** (*Aniba fragrans*- bark), **Am** (*Annona montana*- leaf), **Cf1** (*Connarus favosus*-bark), **Jp** (*Justicia pectoralis*- leaf), **Pr** (*Plathymenia reticulata*-bark), **Pm** (*Philodendron megalophyllum*- vine), **Cf2** (*Cassia fistula*- seed), **Lf** (*Libidibia ferrea*- seed), **Cb** (*Crataeva benthamii*- leaf), **Kb** (*Kalanchoe brasiliensis*-

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Taxon analysis of seed plants used in studies of blood platelet function*

Postepy Hig Med Dosw (online), 2013; 67: 1154-1165

Table 4. Share of families richest in genera/species used in blood platelet studies

Family	No. of taxa (n)	%
<i>Asteraceae</i>	19	19.4
<i>Fabaceae</i>	15	15.3
<i>Rosaceae</i>	6	6.1
<i>Apiaceae</i>	4	4.1
<i>Moraceae</i>	4	4.1
<i>Zingiberaceae</i>	4	4.1
<i>Lamiaceae</i>	3	3.1
<i>Adoxaceae</i>	2	2.0
<i>Ericaceae</i>	2	2.0
<i>Malvaceae</i>	2	2.0
<i>Rutaceae</i>	2	2.0
<i>Solanaceae</i>	2	2.0
remaining	33	33.7
Total	47	100

Achillée, Armois

Réglisse

Ronce

Strategy 1 (#1): flavonoids AND platelet*

Strategy 2 (#2): polyphenols AND platelet*

Strategy 3 (#3): polyphenolic compounds AND platelet*

Stratégie de recherche de médicaments à partir des familles chimiques actives

Angiogénèse

PHYTOTHERAPY RESEARCH

Phytother. Res. 25: 1–10 (2011)

Voie VEGF/VEGFR-2 alternative (cancer, rétinopathie, PR, obésité, endométriose)

Alternatives aux -mab, -tinib (bevacizumab, gain efficacité, profil sécurité) screenées sans essais clinique

Table 1. Angiogenesis-inhibiting phytochemicals

Compound classification	Compound	Scientific name	Crude Drugs	Efficacy	IC ₅₀	References
POLYPHENOLIC COMPOUNDS						
Flavonoid polyphenolics						
Flavonol	Quercetin	<i>Rosa multiflora</i>	Rosae Fructus	Tumor angiogenesis	>100 μM	Chen <i>et al.</i> , 2008
	Fisetin	<i>Gleditsia japonica</i>	Gleditsiae Spina	Inflammatory angiogenesis Endometriosis-related angiogenesis Inflammatory angiogenesis	~2.0 μM	Lee, 2003 Laschke <i>et al.</i> , 2008; Xu <i>et al.</i> , 2009 Lee <i>et al.</i> , 2009b
Flavone	Apigenin	<i>Hydnocarpus anthelminthia</i>	Hydnocarpi Semen	Corneal neovascularization Tumor angiogenesis	~5.0 μM	Joussen, 2000 Liu <i>et al.</i> , 2005
	Morelloflavone	<i>Hovnia dulcis</i> <i>Garcinia dulcis</i>	Hoveniae Semen Cum Fructus Garciniae Fructus	Tumor angiogenesis	<20 μM	Jeon <i>et al.</i> , 2005
Flavanol	Epigallocatechin gallate	<i>Thea sinensis</i>	Theae Folium	Tumor angiogenesis	6.5–25 μM	Dona <i>et al.</i> , 2003; Xu <i>et al.</i> , 2009;
Isoflavone	Genistein	<i>Pueraria lobata</i> <i>Punica granatum</i>	Puerariae Radix Granati Cortex	Tumor angiogenesis	~10 μM	Büchler, 2004; Wang, 2005
Phenolic acids	Gallic acid	<i>Euphorbia pekinensis</i> <i>Sanguisorba officinalis</i>	Euphorbiae Radix Sanguisorbae Radix	Tumor angiogenesis	~100 μM	Liu, 2006
	Ellagic acid	<i>Geranium thunbergii</i>	Geranii Herba	Tumor angiogenesis	0.18 μM	Labrecque <i>et al.</i> , 2005
	1,2,3,4,6-penta-O-galloyl-β-D-glucose (PGG)	<i>Euphorbia pekinensis</i> <i>Paeonia lactiflora</i>	Euphorbiae Radix Paeoniae Radix	Tumor angiogenesis	~4 μM	Lee, 2004; Huh <i>et al.</i> , 2005; Zhang <i>et al.</i> , 2009

Table 1. Continued

Compound classification	Compound	Scientific name	Crude Drugs	Efficacy	IC ₅₀	References
Other non-flavonoid polyphenolics	Resveratrol (Stilbene)	<i>Veratrum album</i> <i>Morus alba</i>	Veratrumae Radix	Tumor angiogenesis Inflammatory angiogenesis	0.7 ± 0.1 μM	Chen <i>et al.</i> , 2006; Bishayee, 2009; Bertelli, 2001
	Curcumin	<i>Curcuma longa</i> <i>Curcuma zedoaria</i> <i>Alpinia oxyphylla</i>	Curcumae Longae Radix Zedoariae Rhizoma Alpiniae Fructus	Tumor angiogenesis Adipokine-induced angiogenesis Inflammatory angiogenesis	≈40 μM	Lin, 2007; Kunnumakkara, 2008; Binion, 2008 Ejaz <i>et al.</i> , 2009 Jackson, 2006
TERPENES	Campesterol (Phytosterol)	<i>Gastrodia elata</i>	Gastrodiae Rhizoma	Tumor angiogenesis	≈25 μM	Choi <i>et al.</i> , 2007
INDOLES	Sulforaphane	<i>Raphanus sativus</i>	Raphani Semen	Tumor angiogenesis	≈5 μM	Jackson, 2007; Yao <i>et al.</i> , 2008
PYRANOCOUMARINS AND SIMPLE COUMARINS	Decursin	<i>Angelica gigas</i>	Angelicae Gigantis Radix	Tumor angiogenesis	<10 μM	Lee <i>et al.</i> , 2009b; Jung <i>et al.</i> , 2009; Son, 2009
	Decursinol angelate			Tumor angiogenesis		Jung <i>et al.</i> , 2009; Son, 2009
	Decurisol			Tumor angiogenesis	≈1 μM	
	Scopolin	<i>Scopolia japonica</i> <i>Morus alba</i>	Scopolilae Rhizoma Mori Folium	Inflammatory angiogenesis	N/A	Pan <i>et al.</i> , 2009
MISCELLANEOUS	11,11'-dideoxyverticillin	<i>Shiraia bambusicola</i>		Tumor angiogenesis	≈1 μM	Chen <i>et al.</i> , 2005
	Celastrol	<i>Tripterygium wilfordii</i>	Tripterygiumae Radix	Tumor angiogenesis	≈100 nM	Huang, 2003; Tao, 2003; He, 2009
	Erianin	<i>Dendrobium chrysotoxum</i>	Dendrobium Stipes	Tumor angiogenesis	≈100 nM	Gong, 2004
	Pedicularioside G	<i>Pedicularis striata</i>	Pedicularis Herba	Tumor angiogenesis	<100 μM	Mu, 2008
	Shiraiachrome A	<i>Shiraia bambusicola</i>		Inflammatory angiogenesis	≈2.5 μM	Tong <i>et al.</i> , 2004
	Thymoquinone	<i>Nigella sativa</i>	Nigellae Semen	Tumor angiogenesis	<100 nM	Arbiser, 2007

Table 1. Natural Compounds That Have Direct or Indirect Anti-Angiogenic Potential.

No.	Plant Name	Compound	Possible Mechanism
1	<i>Camellia sinensis</i> (green tea)	EGCG	Abrogates VEGF signaling by interfering with formation of VEGF receptor-2 complex
2	<i>Camptotheca acuminata</i>	Camptothecin	Blocks topoisomerase I, inhibits EC proliferation and tube formation, decreases HIF1 α and VEGF expression
3	<i>Combretum caffrum</i>	Combretastatin	Inhibits tubulin assembly
4	<i>Cordyceps militaris</i>	Unknown	Inhibits FGF-2 expression in EC and MMP-expression in tumor cells
5	<i>Ganoderma lucidum</i>	Polysaccharide, peptide	Causes EC apoptosis by reducing Bcl-2 expression and increasing Bax expression, decreases VEGF secretion from tumor cells
6	<i>Glycine max</i> (soybean)	Genistein	Suppresses VEGF and FGF-2 expression, inhibits receptor tyrosine kinase, inhibits activation of NF- κ B and Akt signaling pathways
7	<i>Glycyrrhiza uralensis</i> (liquorice)	Isoliquiritin	Inhibits tube formation
8	<i>Panax ginseng</i>	Ginsenosides Rb1	Inhibits VEGF production by tumor cells
9	<i>Sinomenium acutum</i>	Sinomenine	G1-G0 arrest of ECs
10	<i>Salvia miltiorrhiza</i> (danshen)	Cryptotanshinone	G1-G0 arrest of ECs, apoptosis of ECs
11	<i>Taxus brevifolia</i>	Taxol	Disrupts microtubule cytoskeleton inhibits VEGF production, inhibits HIF-1 α protein
12	<i>Tripterygium wilfordii</i> Hook.f	Triptolide	Inhibits VEGF expression and secretion from ECs, inhibits COX-1, COX2, and 5-lipoxygenase, decreases transcription of the gene encoding inducible nitric oxides synthase
13	<i>Vinca rosea</i>	Vincristine	Disrupts microtubule cytoskeleton, inhibits VEGF production
14	<i>Vitis</i> spp (grape)	Resveratrol	Disrupts Src-dependent VE cadherin tyrosine phosphorylation

Table I. *In vitro* and *in vivo* research of Chinese medicinal herbs in hemato-oncology.

Herbal preparation	Study description and results	Potential clinical applications
Indirubin and meisoindigo (based on traditional Chinese prescription Ganggui Luhui)	Prolonged durations of chronic phase, overall survival, and a decreased incidence of CML blast crisis at 60 months when meisoindigo and hydroxyurea were given in combination compared to treatment with busulfan, meisoindigo, and hydroxyurea alone [80]	Chronic myeloid leukemia (CML)
<i>Coptidis rhizoma</i> , Huang-lian in traditional Chinese medicine or Orengedokuto (OGT) in traditional Japanese medicine	In a retrospective study, OGT significantly prevented mucositis due to anticancer agents [81] and decreased the incidence of stomatitis compared to allopurinol, sodium gualenate, and povidone-iodine (27.9% vs. 71.6%). Also less drug-induced diarrhea (OGT 9.3% vs. control group 31.7%)	Improved quality of life during treatment of acute leukemia
<i>Radix codonopsis</i> (Dang Shen) and <i>Radix astragali</i> (Huang Qi) used as Shenqi Fuzheng injection (SFI)	A randomized controlled trial on patients with acute leukemia [82]. Compared to control group on chemotherapy only, patients receiving chemotherapy together with SFI had higher peripheral neutrophil counts after the third and fourth weeks of chemotherapy	Neutropenia after treatment for acute leukemia
<i>Scutellaria barbata</i>	Apoptosis in human U937 leukemia cell line [83] and HL-60 human promyelocytic leukemia cell line [84]	Phase 1B for patients with metastatic breast cancer [94]
<i>Scutellaria baicalensis</i>	Induces apoptosis in acute lymphoblastic leukemia, lymphoma, and myeloma cell lines. Effect was associated with mitochondrial damage, modulation of the Bcl family of genes, increased level of the CDK inhibitor p27 (KIP1), and decreased level of c-myc oncogene [85]	
<i>Scutellaria radix</i> and its component baicalein	Baicalein suppressed proliferation and induced apoptosis in human myeloma cells [86]. Liu <i>et al.</i> show that it is also a potent inhibitor of protein phosphorylation induced by IL-6, suggesting its use in therapy of multiple myeloma [87]	
<i>Eugenia jambos</i> L.	Apoptosis in human leukemia cells HL-60 [88]	
<i>Atractylodes macrocephala</i> Koidz	Apoptosis in human lymphoma Jurkat T cells, leukemia U937, and HL-60 cells [89]	
<i>Astragalus mongholicus</i>	Apoptosis in leukemia cell line K562 [90]	
Rocaglamide derived from the traditional Chinese medicinal plant <i>Aglaia</i>	Modulation of mitogen-activated protein kinase activities in leukemia cells [91]	
Protein-bound polysaccharide (PSK) derivative of <i>Coriolus versicolor</i>	Lau <i>et al.</i> showed that this traditional Chinese and Japanese medical mushroom selectively inhibited lymphoma and leukemic cell lines [92] and was dose-dependent. PSK also had potential anti-cancer effects <i>in vitro</i> [93], and in mice	

Recours à la phytothérapie par des patients hospitalisés dans un service d'oncologie pédiatrique : quel respect du bon usage des plantes médicinales en milieu hospitalier ?.

November 2018

Conference: 3^{ème} congrès nationale de la fédération algérienne de pharmacie, Alger, Algérie

50% des patients ont eu recours
37,5% pour soulager les effets secondaires

Pharmacovigilance

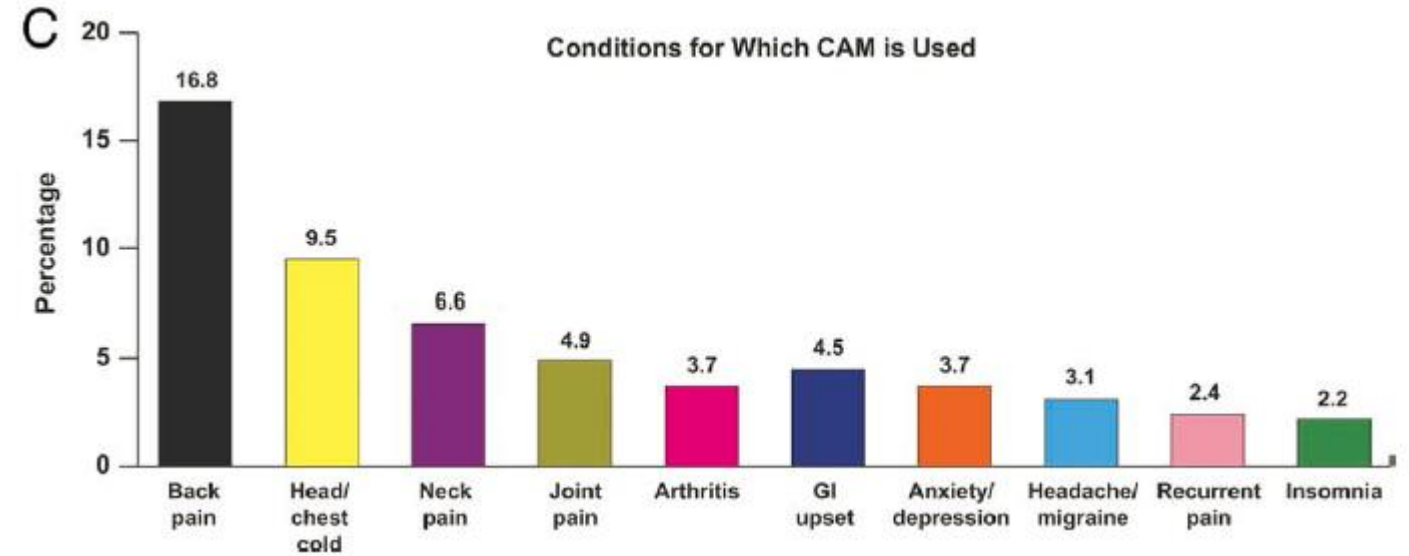
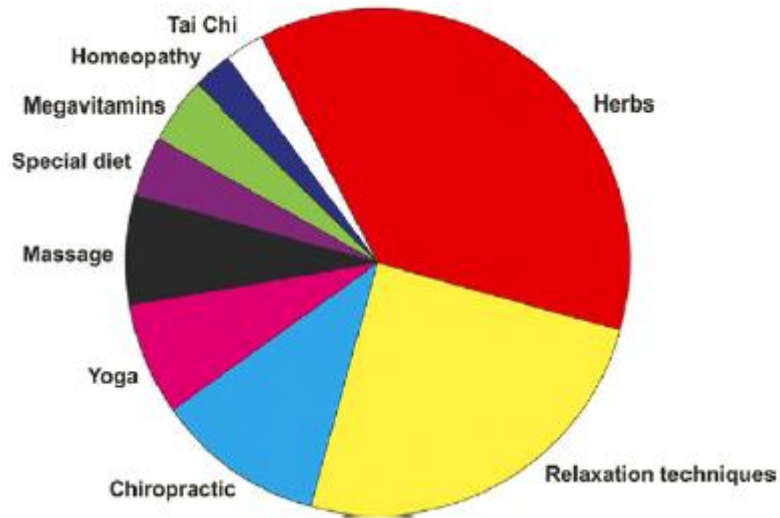


Table 3

Commonly Used Herbs That Can Potentiate the Risk of Bleeding or Arrhythmogenesis

Bleeding

- Alfalfa
- Bilberry
- Danshen
- Dong quai
- Fenugreek
- Garlic
- Ginkgo biloba
- Ginseng
- Motherwort
- Saw palmetto

En 2010 les dépenses non remboursées (cancer) aux USA est de :

- 54\$ pour les compléments thérapeutiques (max 5000\$)
 contre 45\$ pour les prescriptions (max 1400 \$)

- Prix d'achat internet 4,33 – 263 \$ (médiane 27\$)

Pharmacovigilance

Agranulocytoses avec des plantes à visée antalgiques et anti-inflammatoires



Table 1 Case reports of adulteration

First author [Ref] (year, country)	Type of CHM	Source of CHM	Adulterant	Affected patient	Signs/symptoms	Outcome	Comment
Ries [8] (1975, US)	Not mentioned	Not mentioned	Aminopyrine,	77-year-old man	Agranulocytosis	Full recovery	Clinical picture could have
	Not mentioned						
	Not mentioned						
	Not mentioned						
Brooks [9] (1977, Australia)	Chufong Toukuwan						

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Tobacco Products

Import Alert 66-10

FDA Home Import Program Import Alerts Imports Alerts by Number Import Alert

(Note: This import alert represents the Agency's current guidance to FDA field personnel regarding the manufacturer(s) and/or products(s) at issue. It does not create or confer any rights for or on any person, and does not operate to bind FDA or the public).

Import Alert # 66-10
Published Date: 03/18/2011
Type: DWPE
Import Alert Name:
 Chinese Herbal Medicines

Reason for Alert:
 Chinese herbal medications have a history, dating back to 1974, of containing strong prescription drugs.

Pharmacovigilance

Hémorragies

Table 1 (continued)

First author (year) country [reference]	Herbal medicinal products evaluated ^a	N ^b	Type of primary data ^c	Clinical outcomes	Conclusion (see quotes in Table 2) ^d	Quality of SR ^e	Authors' degrees/background	COI/SOF ^f	Comment
Emst (2002) UK [20]	Liquorice, ma huang, dong quai, blue cohosh, <i>Taxus cuspidata</i> , valerian, greater celandine, chapparal, Jin Bu Huan, Skullcap, castor oil, eucalyptus oil, aristolochia, shosaikoto, amica.	18	CRs	From hypoglycaemia, intracerebral haemorrhage, lowering of blood cyclosporin, nausea, vomiting, headache to death	(-/+)	-3	MD, PhD, FRCP	n.m.	In many countries HMPs are marketed as dietary supplements and therefore poorly regulated
Emst (2003) UK [22]	<i>Panax ginseng</i> , valerian, jimson weed, passionflower, licorice, pennyroyale, kava, ma huang, ginkgo biloba, thunder god wine, eucalyptus, St John's wort, aconite	26	CRs, CS	Cerebral arteritis, cerebral oedema, delirium, coma, confusion, encephalopathy, hallucinations, intracerebral haemorrhage, movement disorders, mood disturbances, muscle weakness, paresthesiae, seizures and death.	(-)	3	MD, PhD, FRCP	n.m.	A causal relationship between the HMPs and the AEs were possible or likely.

Adultération plutôt indienne
Contamination plutôt chinoise

Pharmacovigilance

Hémorragies

Table 1 (continued)

Eur J Clin Pharmacol (2013) 69:295–307

First author (year) country [reference]	Herbal medicinal products evaluated ^a	N ^b	Type of primary data ^c	Clinical outcomes	Conclusion (see quotes in Table 2) ^d	Quality of SR ^e	Authors' degrees/background	COI/SOF ^f	Comment
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Sérotoninergique → troubles dépressifs

Inducteur CYP450 3A4

Baisse des concentrations de warfarine, ciclosporine, tacrolimus

Saignements intermenstruels avec contraceptifs oraux



Hypericum perforatum, Hypericaceae

Zhou, Shufeng et al.

“Pharmacokinetic interactions of drugs with St John's wort.”

Journal of psychopharmacology (Oxford, England) vol. 18,2 (2004): 262-76.

Pharmacovigilance

PHARMACOTHERAPY Volume 31, Number 5, 2011

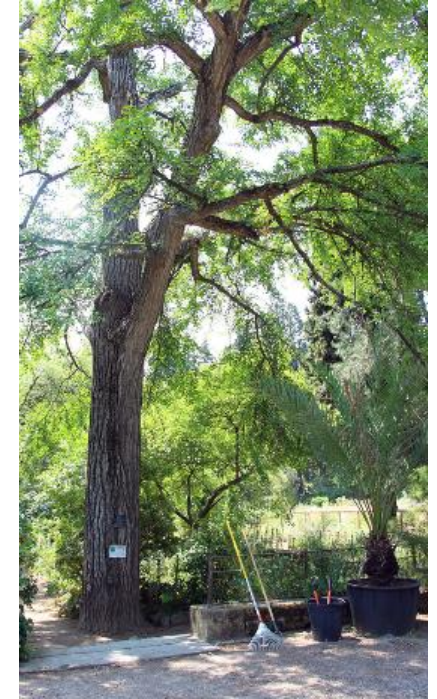
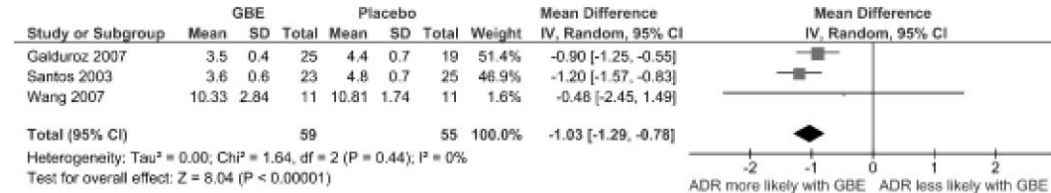
Is There a Risk of Bleeding Associated with Standardized *Ginkgo biloba* Extract Therapy? A Systematic Review and Meta-analysis

Andrea J. Kellermann, Dipl. Pharm., and Charlotte Kloft, Ph.D.



Allégations :

- Flexibilité érythrocytaire
- Réduction viscosité sanguine
- Anti-oxydant
- Modulation neurotransmission



11. Institute for Quality and Efficiency in Health Care (IQWiG). Ginkgo in Alzheimer's disease. IQWiG reports—commission no. A05–19B 2010. Available from http://www.iqwig.de/download/A05-19B_Executive_Summary_Ginkgo_in_Alzheimers_disease.pdf. Accessed July 23, 2010.

12. Weinmann S, Roll S, Schwarzbach C, Vauth C, Willich SN. Effects of *Ginkgo biloba* in dementia: systematic review and meta-analysis [online exclusive article]. BMC Geriatr 2010;10:14. Available from <http://www.biomedcentral.com/1471-2318/10/14>.

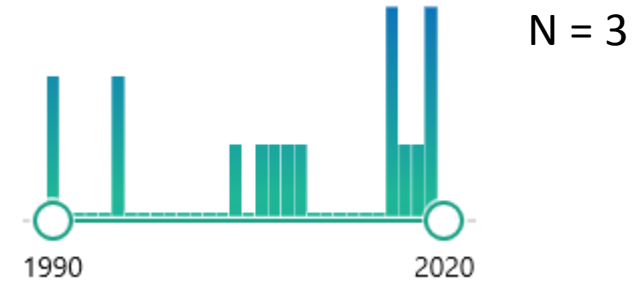
13. Pittler MH, Ernst E. *Ginkgo biloba* extract for the treatment of intermittent claudication: a meta-analysis of randomized trials. Am J Med 2000;108:276–81.

- ❖ blood flow,
- ❖ adenosine 5'diphosphate (ADP)-induced platelet aggregation,
- ❖ fibrinogen concentration,
- ❖ activated partial thromboplastin time, and prothrombin time

Pharmacovigilance



Allium sativum, Liliaceae



Propriétés in vitro :

Suppression de la mobilisation du calcium intraplaquettaire

Inhibition COX et donc formation de thromboxane A₂

Compétition avec le récepteur GPIIb/IIIa du fibrinogène

Augmentation des concentrations de cAMP, cGMP et NO

Ajoene : inhibiteur de l'activation plaquettaire induite par le collagène

Rahman K.
Effects of garlic on platelet biochemistry and physiology.
Mol Nutr Food Res. 2007 Nov;51(11):1335-44.

Allégations :

- Prévention des maladies cardiovasculaires notamment par l'inhibition de l'aggrégation plaquettaire *in vitro*

- Pas de preuves *in vivo*

Gardner CD, Lawson LD, Block E, et al. Effect of raw garlic vs commercial garlic supplements on plasma lipid concentrations in adults with moderate hypercholesterolemia: a randomized clinical trial. Arch Intern Med 2007;167:346-53.

Tachjian et al. 517

Herbal Products and Cardiovascular Diseases

JACC Vol. 55, No. 6, 2010
February 9, 2010:515-25

Table 1 Herbal Products to Avoid in Patients With Cardiovascular Diseases*

Herb	Purported Use	Cardiac Adverse Effect of Interaction
Garlic	High cholesterol, hypertension, heart disease	Increases bleeding risk with warfarin

Risque de saignements avec warfarine et aspirine

Bien d'autres

Comparative study on the effects of aqueous extracts of viscum album (mistletoe) from three host plants on hematological parameters in albino rats.

Olusola Ladokun, Matthew Ojezele, Oluwatosin Arojojoye

Department of Biochemistry, Lead City University, Ibadan, Oyo state, Nigeria

Élévation des leucocytes

Rutosides for prevention of post-thrombotic syndrome

Main results

No studies were identified comparing rutosides versus any alternative in the prevention of PTS.

MorlingJR, YeohSE, KolbachDN.

Rutosides for prevention of post-thrombotic syndrome.

Cochrane Database of Systematic Reviews 2018, Issue 11. Art. No.: CD005626.

Traditional Chinese Medicine herbs for stopping bleeding from haemorrhoids

No assured evidence on traditional Chinese medicine herbs (TCMHs) stopping bleeding from haemorrhoids but limited evidence on TCMHs alleviating some symptoms caused by haemorrhoids.

GanT, LiuYD, WangY, YangJ.

Traditional Chinese Medicine herbs for stopping bleeding from haemorrhoids.

Cochrane Database of Systematic Reviews 2010, Issue 10. Art. No.: CD006791.

Phlebotonics for haemorrhoids

Dont rutosides (quercétine), saponosides (escine)



Authors' conclusions

The evidence suggests that there is a potential benefit in using phlebotonics in treating haemorrhoidal disease as well as a benefit in alleviating post-haemorrhoidectomy symptoms. Outcomes such as bleeding and overall symptom improvement show a statistically significant beneficial effect and there were few concerns regarding their overall safety from the evidence presented in the clinical trials.

PereraN, LiolitsaD, IypeS, CroxfordA, YassinM, LangP, UkaegbuO, van IsumC.

Phlebotonics for haemorrhoids.

Cochrane Database of Systematic Reviews 2012, Issue 8. Art. No.: CD004322.

En synthèse :

- Vaste potentiel
- Approches pharmacologiques/ethnopharmacologiques
- Extrait / caractérisation d'un composé candidat (holistique ?)
- Identification d'un modèle physiopathologique nécessaire
- Sortir de l'effet in vitro = enjeu actuel
- Essais cliniques de bon niveau méthodologique apparaissent en hémostase mais beaucoup d'autres de peu de valeur
- Existence de traitement de référence : prise de risque
- Moins d'effets secondaires ?
- Patients plus « convaincus » que les soignants
- Intégrer le risque : dialogue

11% of the 252 drugs considered as basic and essential are derived from plants

Rates SM. Plants as source of drugs. *Toxicol* 2001;39:603–13.

A.P. Rogerio et al. / *Pharmacological Research* 62 (2010) 298–307

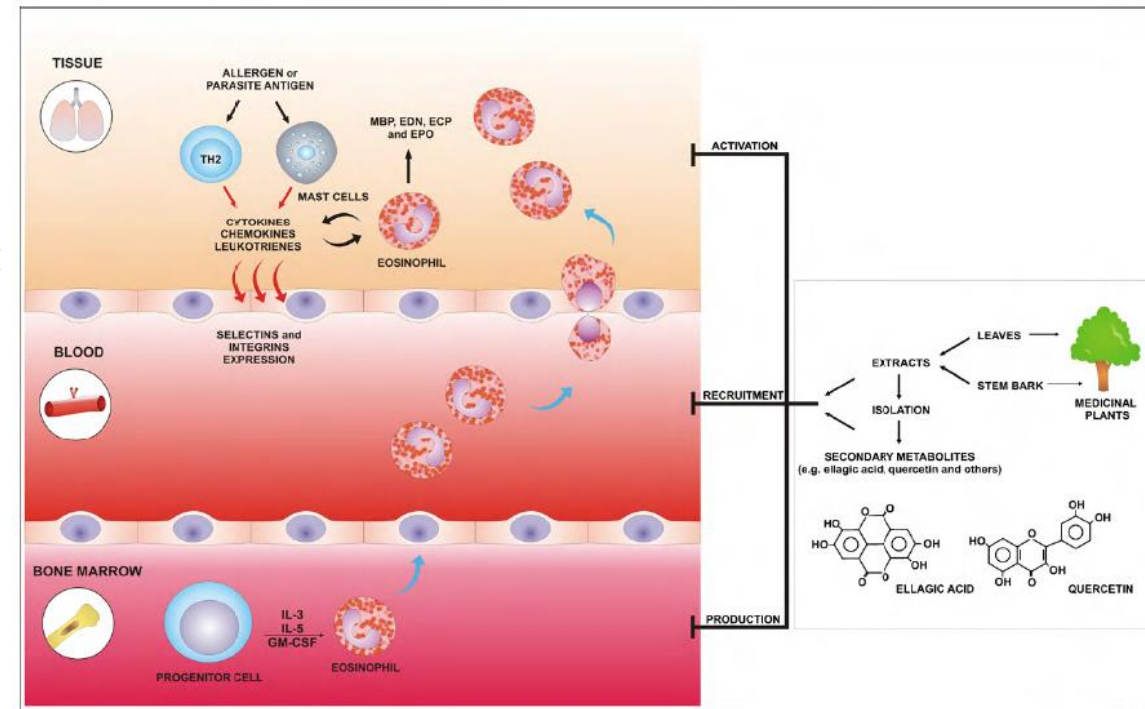


Fig. 1. Potential target of medicinal plants or secondary metabolites in eosinophilic inflammation.

Des approches différentes selon les spécialités...

Conclusions d'articles

Journal of the American College of Cardiology Vol. 55, No. 6, 2010

There is a clear need for better public and physician understanding of herbal products through health education, early detection and management of herbal toxicities, scientific scrutiny of their use, and research on their safety and effectiveness. Regulatory policies are also needed to protect people from untoward effects on their health and finances. The principles and standards of evidence for safety and efficacy of drugs used in conventional medicine should also apply to herbal and other CAM products, with decisions about their use based on the results of scientific inquiry rather than on long-held but untested belief systems or traditions (88).

Leukemia & Lymphoma, August 2010; 51(8): 1414–1423

We recommend implementing a combined non-judgmental approach and scientific appraisal, which will enhance doctor-patient communication and inform patients when they need to make their choices. We also recommend considering the addition of a herbal consultant to the hemato-oncological team in order to improve the hemato-oncologist's ability to provide educated and well-informed advice to patients regarding the potential benefits and risks of specific herbs.