All Scotland Let's Talk Clots Patient Meeting

Thursday 10th May 2018

CHAIR, ANDREA CROFT

Originally trained as SEN in the Royal Air Force, following a four year break abroad Andrea returned to the UK and in 1992 undertook Project 2000. After inheriting the management of the hospital Warfarin clinic in Bridgend General Hospital in 1995 she developed an interest in Anticoagulation. Since 2002 Andrea has pioneered and championed the need to manage all hospitalised patients appropriately keeping them safe from the associated risks of developing a Hospital Acquired Thrombosis (HAT). Since 2009 Andrea has held the role of HAT Project Lead in Abertawe Bro Morgannwg University Health Board. Andrea is Wales her passion and enthusiasm for Anticoagulation have taken her as far afield as Australia. In 2015 3 hospitals in Andrea's Health Board were recognised as Thrombosis Exemplar Centres.

Being part of Thrombosis UK has allowed Andrea the opportunity to spread the thrombosis message to all 4 corners of the UK.

DR MATTHEW FAY

Dr Matthew Fay is a Leeds Medical School graduate, graduating in 1992, very much to the Dean's surprise!

After enjoying a varied few years in hospital practice he became a General Practitioner at Westcliffe Medical Practice in 1999.

In 2001 he established a GPwSI cardiology service for North Bradford PCT.

Dr Fay has a special interest in thrombosis and was National Clinical Lead for Atrial Fibrillation with NHS Improvement Heart & Stroke.

Dr Fay sits as an adviser on several NICE committees (National Institute for Health & Care Excellence) and is passionate about supporting patient education and involvement to improve well-being and outcomes.

Recently appointed a trustee of Thrombosis UK for the work he has been undertaking to raise the profile of thrombosis in general and in particular how it is identified in primary care and how it can be managed in a patient focused manner.

CARA DOYLE

***Cara** graduated from University of Glasgow in 2011 and moved to London to work at King's College Hospital in London.*

Since starting there Cara has worked in the department of haematology - both in the cancer side of specialty and in thrombosis.

For four years Cara worked in anticoagulation and VTE Prevention. Currently she manages one of the four haematology wards. Cara is incredibly interested in thrombosis and take every opportunity to teach on the subject.

KAREN BLEACH

Specialist Nurses, Royal Alexandria Hospital, Paisley

ROBERT THOMSON

Specialist Nurses, Royal Alexandria Hospital, Paisley

Thrombosis UK
Awareness • Research • Care

Endorsed by: WORLD THROMBOSIS DAY 13 OCTOBER

Let's Talk Clots – Scotland
Patient & Carer Information & Support Meeting

Thursday 10th May 2018

Royal College of Physicians and Surgeons, 232-242 St Vincent Street, Glasgow, G2 5RJ

Time	Presentation	Speaker
10:15 – 10:35	**Registration – The Princess Alexandra Room**	
10:35 -10:40	Welcome & Introduction	**Chair: Andrea Croft** Nurse Lead for Thrombosis UK
10:40 – 11:05	The pathway of diagnosis and managing a DVT / PE when a patient first presents	**Karen Bleach and Robert Thomson** Specialist Nurses, Royal Alexandria Hospital, Paisley
11:10 – 11:35	What are blood clots?	**Dr Matthew Fay** GP and GP Lead for Thrombosis UK
11:40 – 11:45	Question & Answer session	**All**
11:45 – 12:05	A Patient Perspective	**TBC**
12:05 – 12:45	Light lunch and opportunity to meet and chat	
12:45 – 13:10	Anticoagulation: understanding options, when and for how long	**Andrea Croft** Specialist VTE Nurse and
13:10 – 13:40	Thrombosis and women's health: Risk factors, contraceptive pill, HRT and discussions with you doctor	**Dr Matthew Fay**
13:40 – 14:10	Travel, exercise and health after diagnosis of a blood clot	**Cara Doyle** Specialist VTE Nurse
14:10 – 14:20	Question & Answer session	**All**
14:20 – 14:25	Helping to improve awareness and focus on thrombosis	**Jo Jerrome** CEO Thrombosis UK
14:25	Close of meeting	

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Andrea Croft

Lead ANP - Anticoagulation; Abertawe Bro Morgannwg University Health Board

Wales Nurse Director – Thrombosis UK

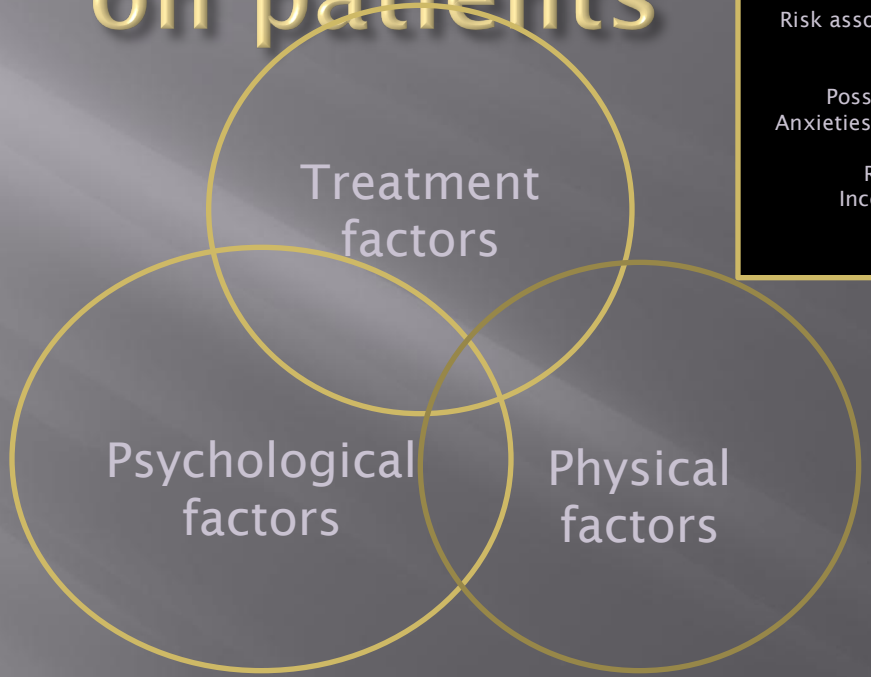
Introduction

A diagnosis resulting in the need for long-term anticoagulation therapy can have an enormous effect on the lifestyle of the patient and their family.

Impact of a diagnosis requiring anticoagulation

- Anxiety regarding medical condition
- Effect on quality of life
- Effect on work life
- Effect on family life

Effect of anticoagulation therapy on patients



Hypersensitivity to condition
Health anxiety
Fear of dying
Fear of recurrence
Sense of own mortality
Anger
Denial
Treatment issues causing stress
Lack of control
Loss of self-worth
Loss of identity
Fear of the unknown
Fear of further events
No longer attractive to partner
Fear of travelling far from home
Therapy affects whole family
Why me?

Risk associated with anticoagulation therapy
Clinic visits
Lack of information
Possible food and drink restrictions
Anxieties regarding INR results: too high, too low
Relationship with clinic staff
Inconvenience of attending clinic
Treatment duration
Impact on lifestyle

Physical symptoms of AF / VTE
PTS
Fear of recurrence
Pain and fatigue
Recovery
Misinterpretation of symptoms
No longer attractive to partner
'Disabled'
Activities restricted
Loss of image

Adapted from Hunter et al. 2016

Treatment factors

- Risk associated with anticoagulation therapy
- Clinic visits
- Lack of information
- Possible food and drink restrictions
- Anxieties regarding INR results: too high, too low
- Relationship with clinic staff
- Inconvenience of attending clinic
- Treatment duration
- Impact on lifestyle

Physical factors

Physical symptoms of AF/VTE
PTS
Pain and fatigue
Recovery
Misinterpretation of condition/treatments
Feeling ‘disabled’
Activities restricted
Loss of image

Psychological factors

- Hypersensitivity to condition
- Health anxiety
- Fear of dying
- Sense of own mortality
- Anger
- Denial
- Treatment issues causing stress
- Lack of control
- Fear of recurrence
- Loss of self-worth
- Loss of identity
- Fear of the unknown
- Fear of further events
- Fear of travelling far from home
- Therapy affects whole family
- Why me?

Case Study - George

- Male
- 65 years old
- Office worker

- AF
- Warfarin

- George is an active working man with an equally active wife. He loves travel, especially last minute deals. He loves football and golf and socialising with friends.
- He has 2 grown up children.

George has many concerns

- Warfarin is an inconvenience. I feel like an old man waiting in the clinic to have my blood checked!
- It drives my wife mad as we cannot just up and go on holiday anymore, plus I am limited in what I can eat and drink. It really gets me down!
- My INR is never in range now so I have to keep going back to the clinic, though it's my own fault as I don't take my Warfarin as prescribed. If I feel well, why should I take Warfarin?

George's family have concerns

- The Warfarin therapy really frightens us! What if George needs his blood checking when we are on holiday?
- Dad is so miserable these days, he rarely goes on holiday anymore, he's governed by his Warfarin and going to the INR clinic!
- We all worry George might have a stroke if he doesn't take his Warfarin, but we hate to see him so unhappy!

Discussion

- How can we help allay George's fears, concerns and anxieties?
- How can we reassure him?
- What are the options available to us to help him achieve the optimum lifestyle while undertaking anticoagulation therapy?

What can we as healthcare professionals do?

- Involve patient in treatment plans
- Explanation of medication and effects of treatment
- Encourage therapy compliance
- Jointly explore options

Conclusion

- There will always be a need for Warfarin therapy, such as for those patients where DOACs are contraindicated. Even patients who could take Direct Oral AntiCoagulants(DOAC's) may prefer the social aspects of attending the INR clinic!
- Considering the patient's lifestyle when making the decision as to which anticoagulant to use is fast becoming a fundamental part of the decision-making process
- It is a part of the process in which we, as healthcare professionals, will play a major role to provide our patients with information to help decide the most optimal treatment for them

Thank you

Travel, exercise & life after a diagnosis of a blood clot

CARA DOYLE

HAEMATOLOGY NURSE

KING'S COLLEGE HOSPITAL, LONDON

Venous Thromboembolism (VTE)

Deep vein thrombosis

Pulmonary embolism

Symptoms of VTE

- Leg pain
- Swelling
- Redness
- Difficulty walking
- Shortness of breath
- Chest pain
- Coughing up blood
- No symptoms

Why me?

Provoked

- Hospital stay
- Long haul flight
- Pregnancy
- Family history

Unprovoked

- ?

Treatment


NDC 50458-579-30
30 Tablets
Xarelto
(rivaroxaban)
Tablets 20 mg
Rx only
janssen


Crescent Pharma
WARFARIN
Tablets 5mg
Each tablet contains:
warfarin sodium 5 mg
28
Tablets


CLEXANE
0.4
mg

What now?

Can I work?

Can I travel?

Can I exercise?

Will I get another clot?

Can I work?

- Yes!
- You should get back to work as soon as you feel ready
- Depending on what your job involves you may have to make adjustments

Can I exercise?

- Evidence has shown that light exercise can help reduce pain and swelling following a deep vein thrombosis
- Swimming can be very good for getting you started (although should be avoided if you have a clot in your upper arm, as should weight lifting)
- Six weeks is usually the time frame we advise for returning to normal physical activity
- Will always depend on how you are feeling and should be discussed with your specialist nurse

Can I travel?

- Not initially…
- We usually recomend waiting 6 weeks before you do any long distance travel
- Journeys less than 4 hours are ok
- Very important to stay well hydrated
- Take a walk at regular intervals/flex your calf muscle

Will I get another clot?

- There is no definitive answer
- The best thing is to employ all preventative measures advised by your doctor and live as healthy a lifestyle as possible
- Remember that family history of a blood clot is a risk factor

Psychological impact

"Five years later and anytime I have a symptom – my mind automatically thinks there's the possibility it could be a clot"

"It was one of the scariest things I've had happen to me…I cried for the first week"

""It's good to know that I'm not the only one who was overwhelmed after being diagnosed with a DVT; it was truly life changing."

"I think of my husband witnessing my collapse in our home, an image that still haunts him even now."

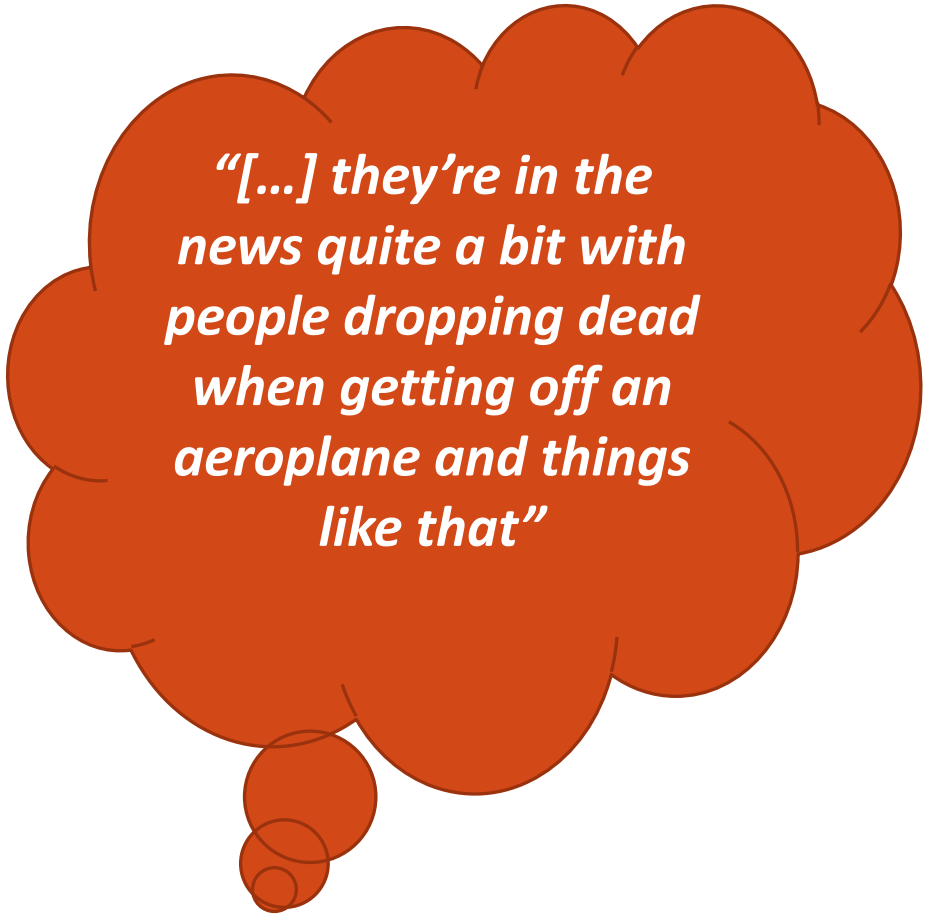
"you don't really have time to assess the emotions. You're kind of on auto pilot. Couple of years later, it catches up with you."

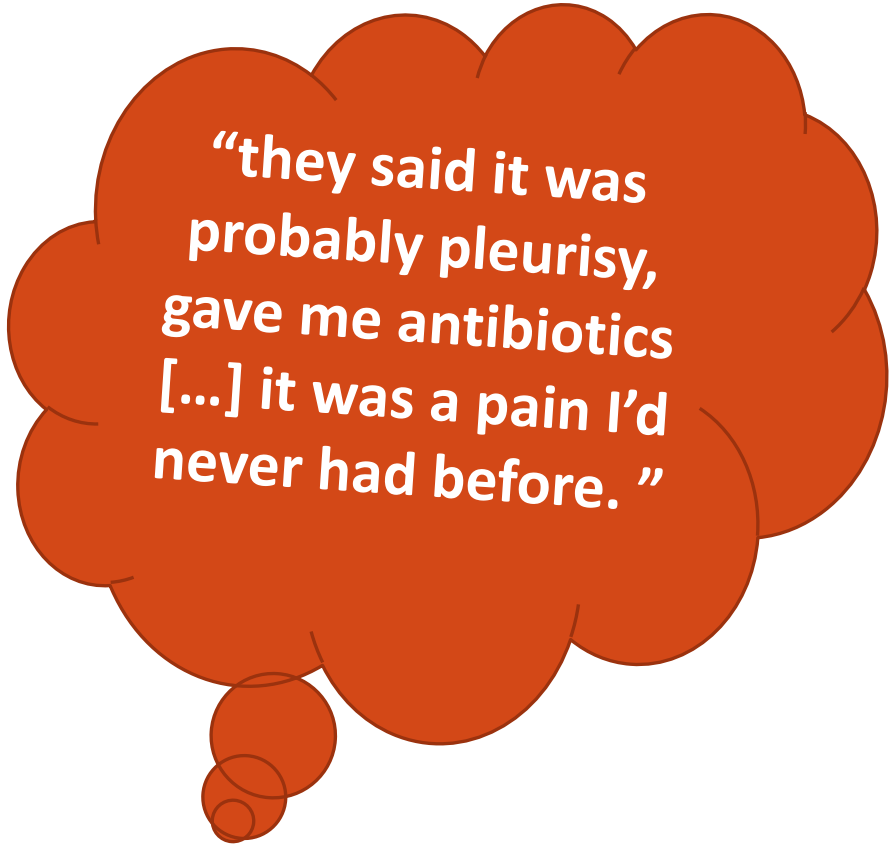
"It never leaves you completely, the details, the memory of not being able to take a breath"

Perception

- Research has shown that a lack of patient information on thrombosis leads to poorer compliance with preventative measures
- What information did you receive? Did it answer all of your questions?
- What information were you given about future thrombosis?
- Raising awareness is so important

Patient thoughts





Prevention of thrombosis

- Avoiding episodes of immobility
- Taking preventative action, for example before a long journey
- Informing future healthcare professionals

Lifestyle

- Healthy diet
- No smoking
- Regular exercise
- Take medication

Looking ahead

- Recognising symptoms
- Knowing who to contact
- Knowing when not to worry


THANKS!

Deep Vein Thrombosis & Pulmonary Embolism: Presentation, Diagnosis & Management.

Robert Thomson: Advanced Nurse Practitioner, Ambulatory Emergency Care Unit, Queen Elizabeth University Hospital, Glasgow

Karen Bleach: Advanced Nurse Practitioner, Ambulatory Emergency Care Unit,

Royal Alexandra Hospital, Paisley.

Overview

- Facts and figures
- Presenting to hospital
- Clinical examination
- Tests & investigations
- Diagnosis
- Management
- Questions

Venous Thromboembolism

DVT + PE

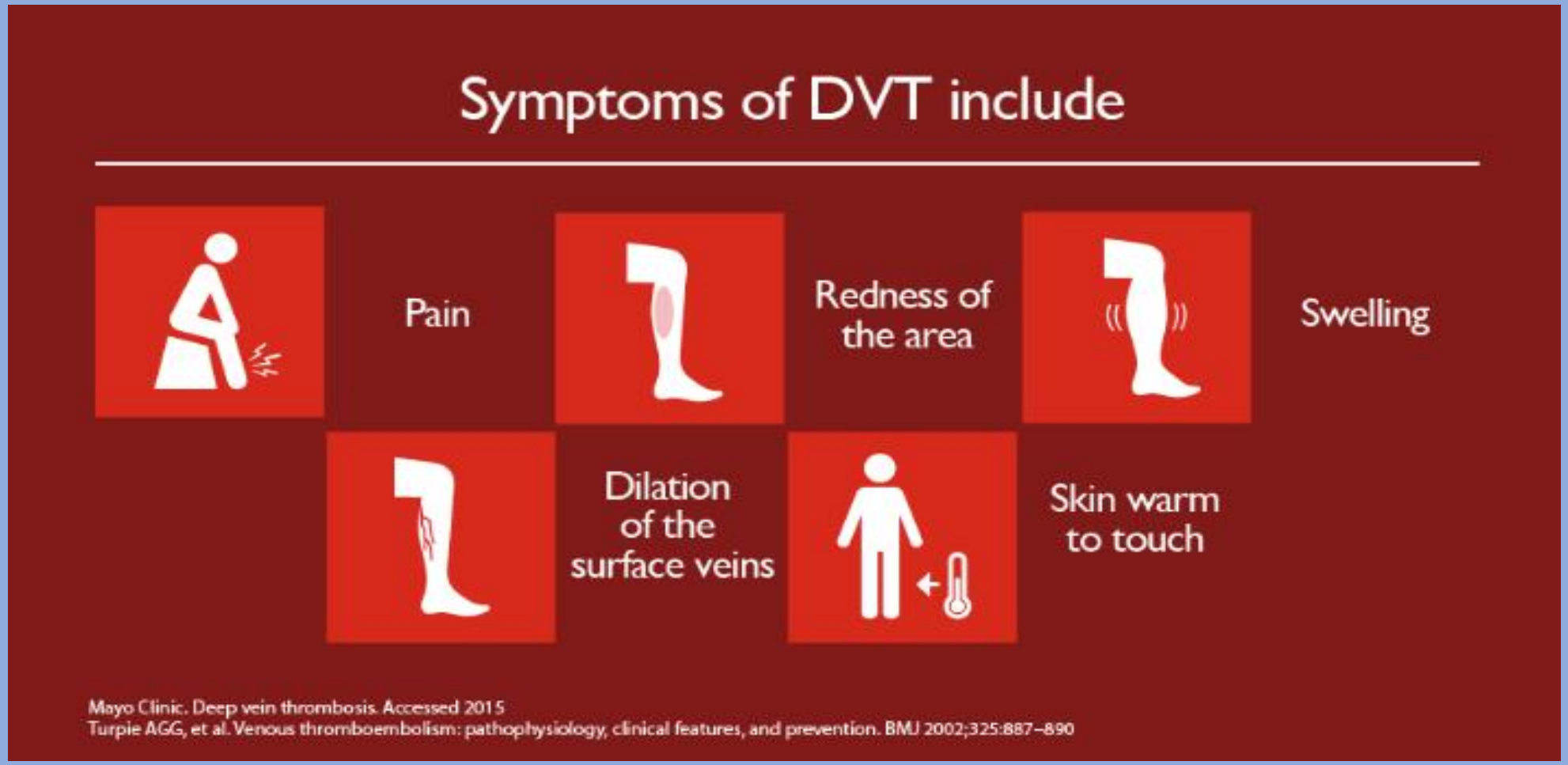
= VTE

The Problem

Every 6 seconds someone with VTE dies globally!

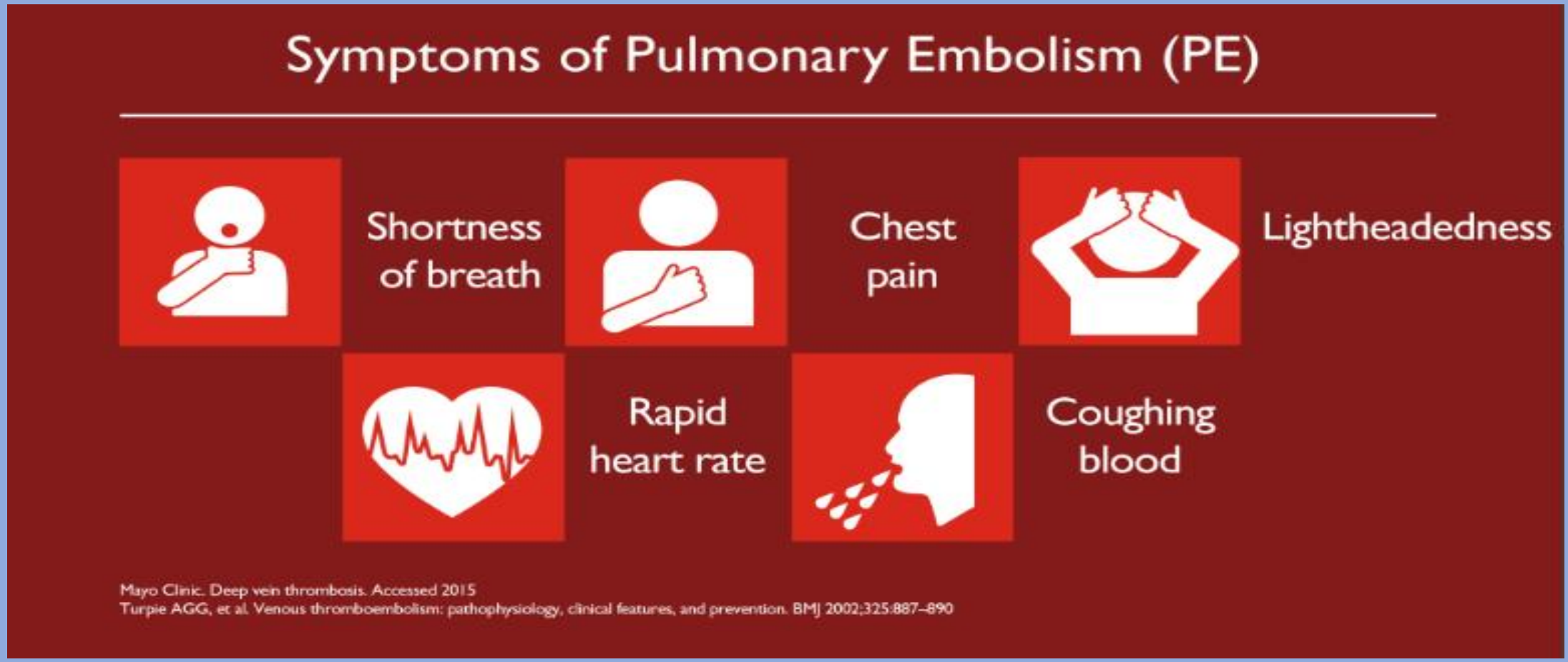
DVT: The warning signs

NHS Greater Glasgow and Clyde



PE: Signs & Symptoms

The Symptoms



Are you at risk of VTE?

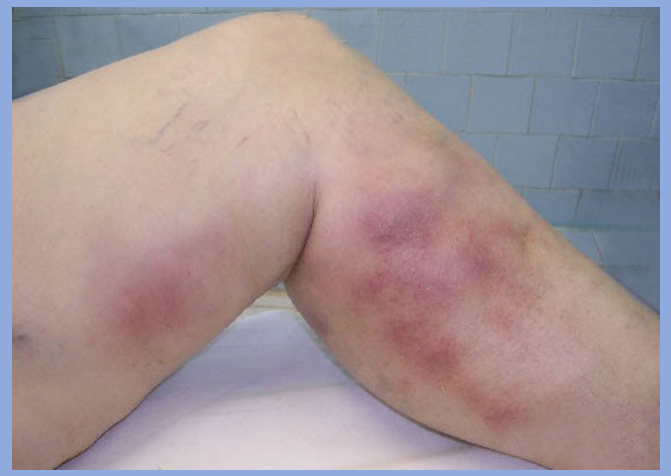
https://www.nhs.uk/Tools/Pages/VTE-self-assessment.aspx

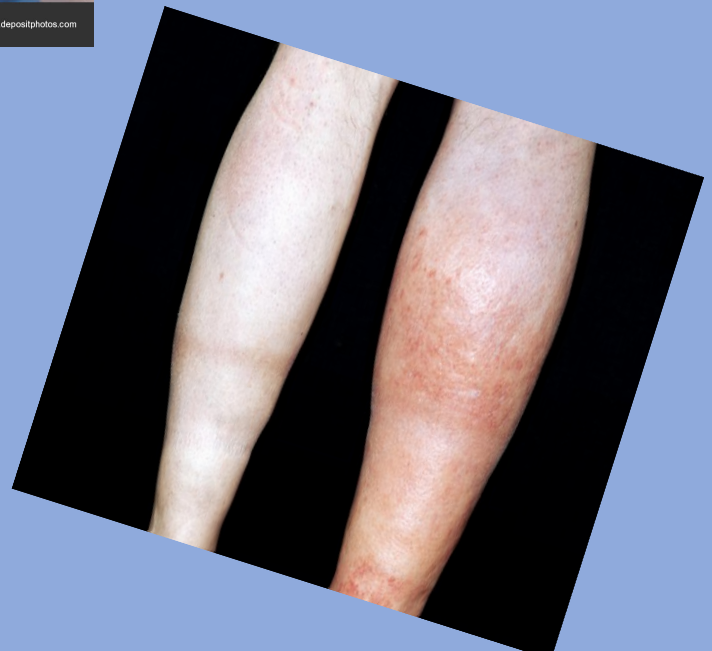
Presenting to hospital

NHS
Greater Glasgow and Clyde

What should you expect?

- Detailed history
- Clinical examination
- Risk Assessment





Risk assessment tool: Wells score

NHS Greater Glasgow and Clyde

Wells Probability score for DVT

<2 DVT unlikely, >2 DVT likely

Clinical features	points
Active cancer	1
Paralysis,paresis,recent immobilisation of lower extremities	1
Localised tenderness along deep venous system	1
Entire leg swollen	1
Calf swelling>3cm larger than asymptomatic side	1
u/l pitting edema	1
Collateral superficial veins(non varicose)	1
Previously documented DVT	1
Alternative diagnosis as likely or more likely than DVT	-2

Tests and Investigations

Deep Vein Thrombosis	**Pulmonary Embolism**
Bloods (including D Dimer)	Bloods (including D Dimer and Troponin)
Doppler Ultrasound	ECG (heart trace)
	Chest X-RAY
	CT Pulmonary Angiogram

No DVT - so now what?

- **Alternative Diagnosis:**
- Muscular
- Baker's Cyst
- Superficial Thrombophlebitis (inflammation of the veins)

- ***Based on the D Dimer level, we would repeat the ultrasound in 1 week.***

No PE – what now?

- **Alternative diagnosis:**
- Muscular chest pain
- Chest infection
- Cardiac chest pain

- ***Treat the likely cause, and refer back to GP***

Management of DVT and PE

DVT	PE
Counselled on Anticoagulants “blood thinners” (Apixaban, Rivaroxaban, Warfarin)	Counselled on Anticoagulants “blood thinners” Apixaban, Rivaroxaban, Warfarin)
CXR	Discussion at weekly MDT re further tests and investigations
Measured for anti-embolic stockings	Refer to Respiratory (Chest) Clinic
Referral to Orthotics department	Communication with GP re management and duration of anticoagulation
Discussion at weekly MDT re further follow up (Thrombosis Clinic) and imaging if appropriate.	
Communication with GP re management and duration of anticoagulation	

Future risk of DVT: DASH Score

D-dimer abnormal Measured ~1 month after stopping anticoagulation	No	0
	Yes	+2
Age ≤50 years	No	0
	Yes	+1
Male patient	No	0
	Yes	+1
Hormone use at VTE onset (if female) If male patient, select "No"	No	0
	Yes	-2

FACTS & FIGURES

DASH Score	Annual Recurrence Rate
-2	1.8%*
-1	1.0%
0	2.4%
1	3.9%
2	6.3%
3	10.8%
4	19.9%

Questions


what are my **options**?
what are the possible **benefits** and **risks**?
how can we make a decision **together** that is **right for me**?

What are blood clots?

Dr Matthew Fay

GP Principal The Willows Medical Practice- Queensbury

GPwSI and Co-Founder Westcliffe Cardiology Service

GP Partner Westcliffe Medical Group

Blood clots

Page contents

Blood clots can be very serious and need to be treated quickly. Staying healthy and active can help prevent them.

See a GP urgently if you think you have a blood clot

Symptoms of a blood clot include:

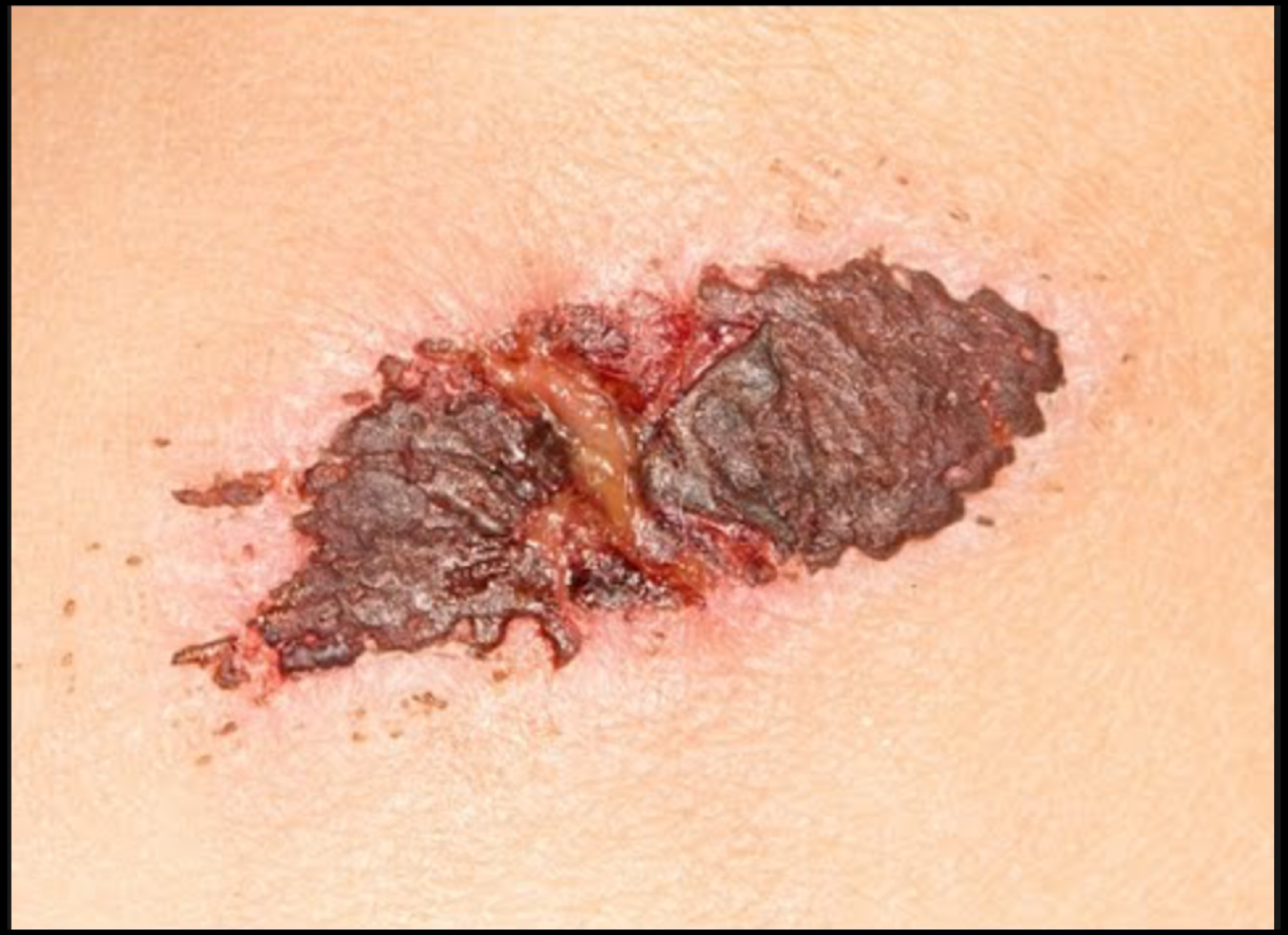
- throbbing or cramping pain, swelling, redness and warmth in a leg or arm
- sudden breathlessness, sharp chest pain (may be worse when you breathe in) and a cough or coughing up blood

Blood clots can be life threatening if not treated quickly.

Go to A&E or call 111 for advice if you can't get a GP

What is a blood clot?

Is a vital part of our system that keeps the blood in the pipes



What is a Thrombus?

- Solid mass of blood constituents
- Formed within the vascular system
- In life

Thrombus is different to Clot!

- Clotting means coagulation which can occur within or outside the vascular system in life or post mortem.

Why does Thrombus occur?

- Abnormalities of the vessel wall
  - atheroma
  - direct injury
  - inflammation

Why does Thrombus occur?

- Abnormalities of blood flow
  - stagnation
  - turbulence
- Abnormalities of blood components
  - smokers
  - post-partum
  - post-op

Lets form a Thrombus

- What do we need
  - Blood
  - Stimulation

Lets form a Thrombus

- What do we need
  - Blood
  - Stimulation
    - Vessel wall damage
    - Vasoconstriction
    - Stagnation of the blood

Lets form a Thrombus

- What do we need
  - Blood
  - Stimulation
    - Vessel wall damage
    - Vasoconstriction
    - Stagnation of the blood
    - Exposure of the collagen and/or fibrin

Lets form a Thrombus

- Platelet activation

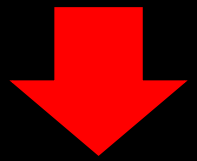
Lets form a Thrombus

- Platelet activation
  - Derived from megakaryocytes in bone marrow
  - No nucleus
  - Contain
    - Alpha granules (adhesion substances)
    - Dense granules (aggregation substances)

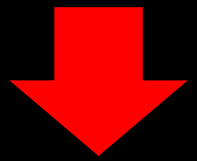
Lets form a Thrombus

On contact with fibrin or collagen platelets release granules which promote aggregation of adjacent platelets to form a mass which covers, for example, an endothelial defect.

Contact with Fibrin or Collagen



Release Granules

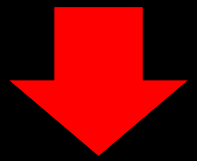


Aggregate to form a mass
E.g. Covering Endothelial Defect

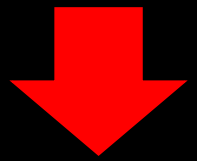
Lets form a Thrombus

Platelet aggregation in this way is a normal phenomenon, and occurs continuously in the body to repair minor endothelial injury.

Contact with Fibrin or Collagen



Release Granules



Aggregate to form a mass
E.g. Covering Endothelial Defect

Lets form a Thrombus

- Not the whole story!

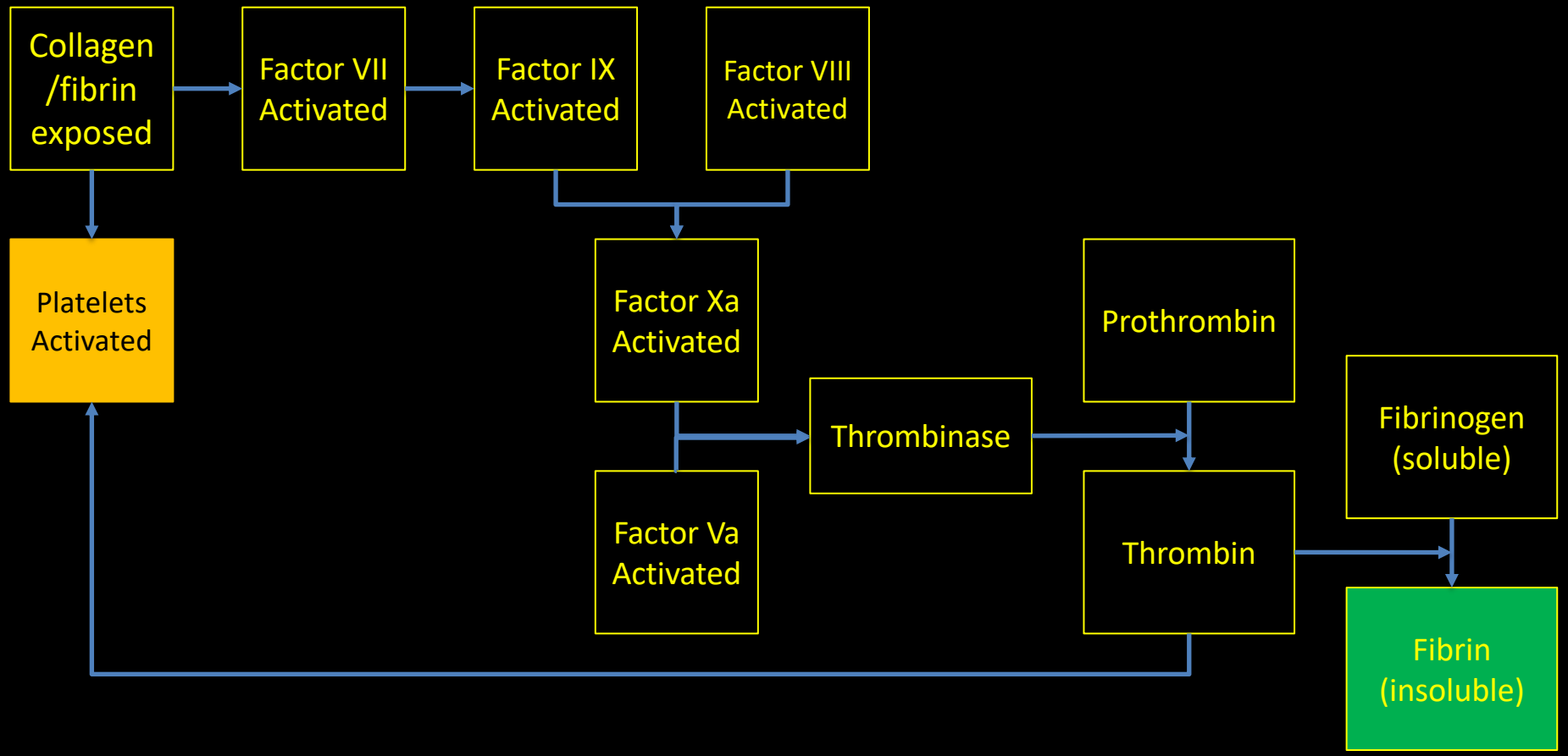
Lets form a Thrombus

- Stimulation
  - Vessel wall damage
  - Vasoconstriction
  - Stagnation of the blood
  - **Exposure of the collagen and/or fibrin**

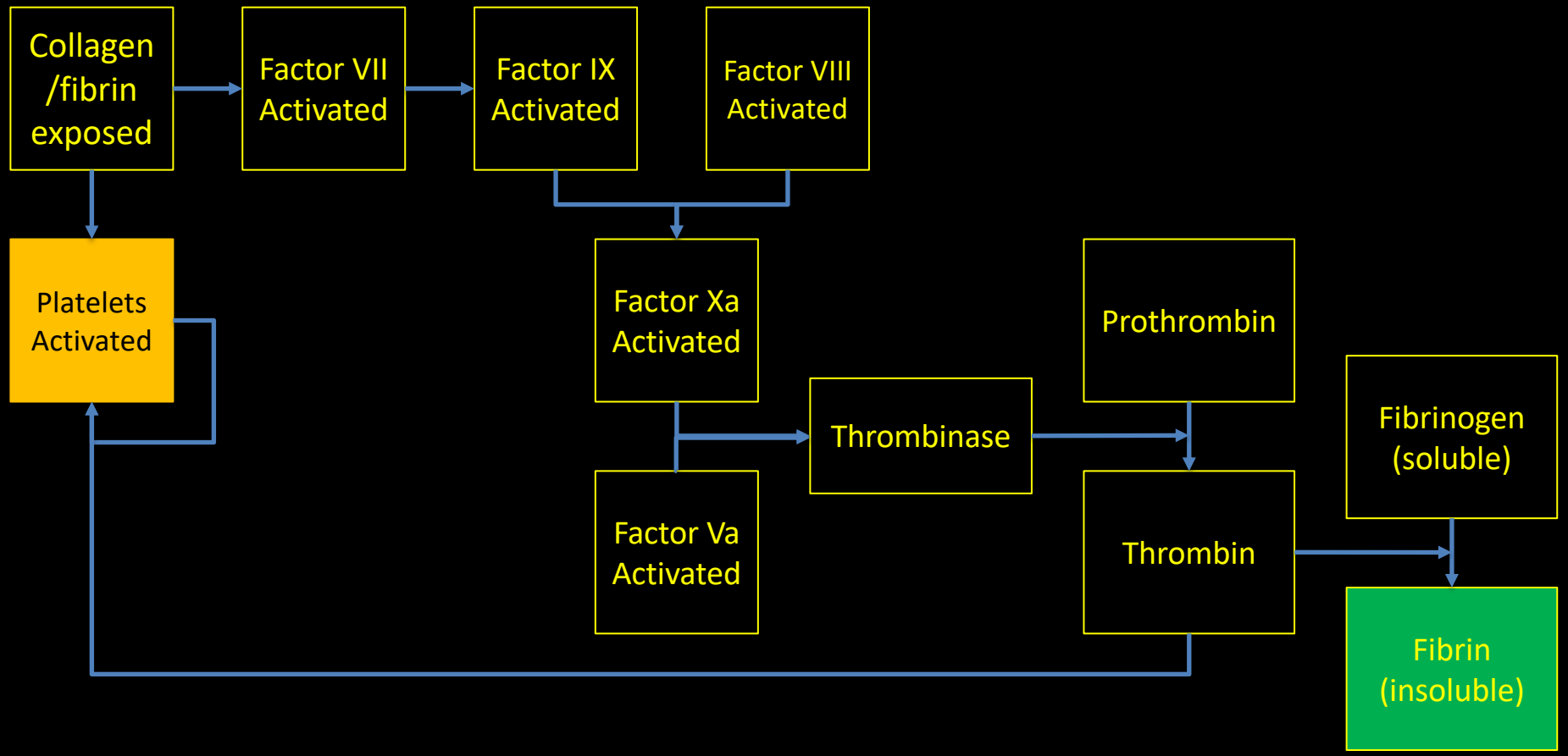
Lets form a Thrombus

- What happens next (simplified)

Lets form a Thrombus



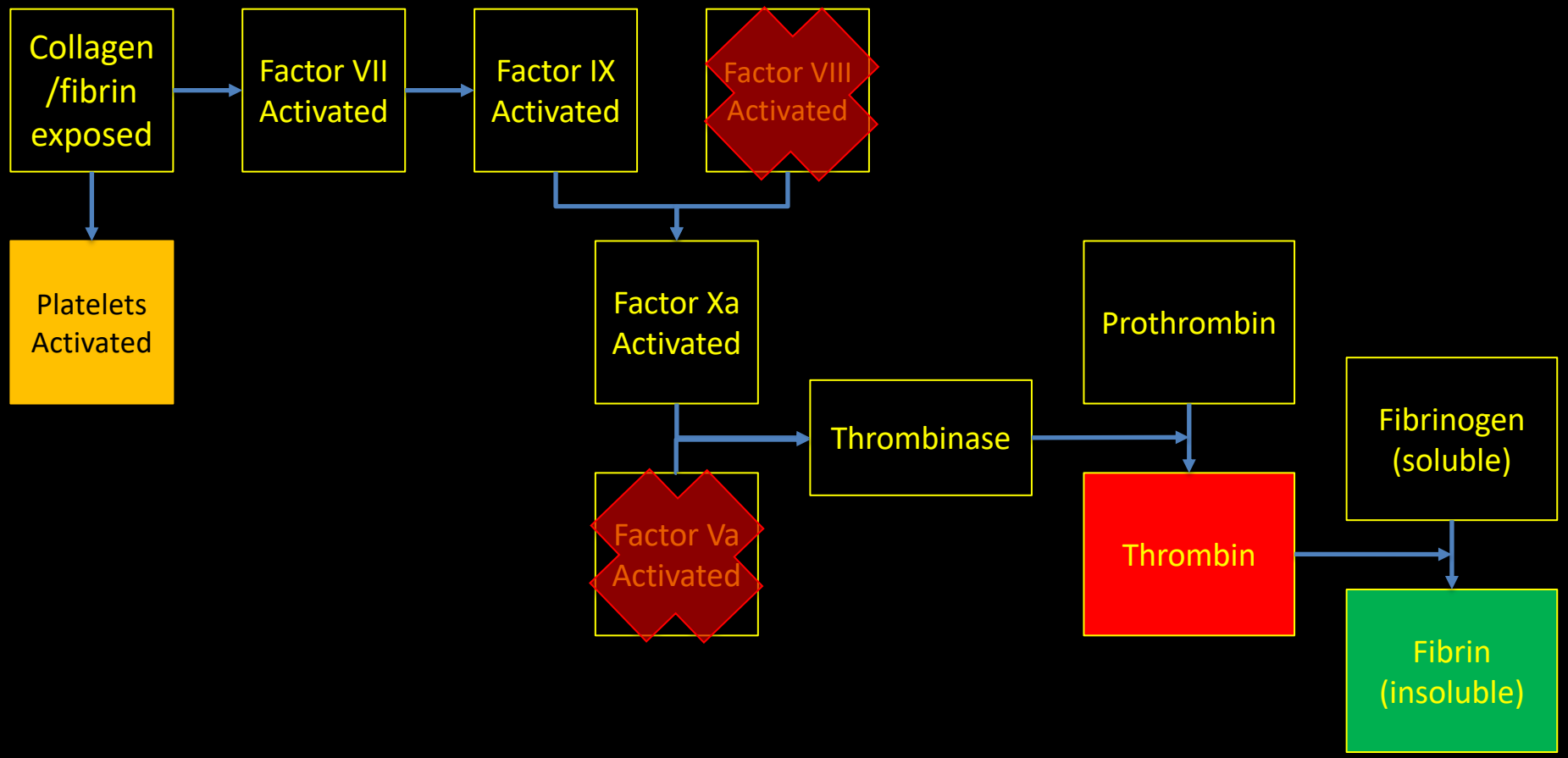
Lets form a Thrombus



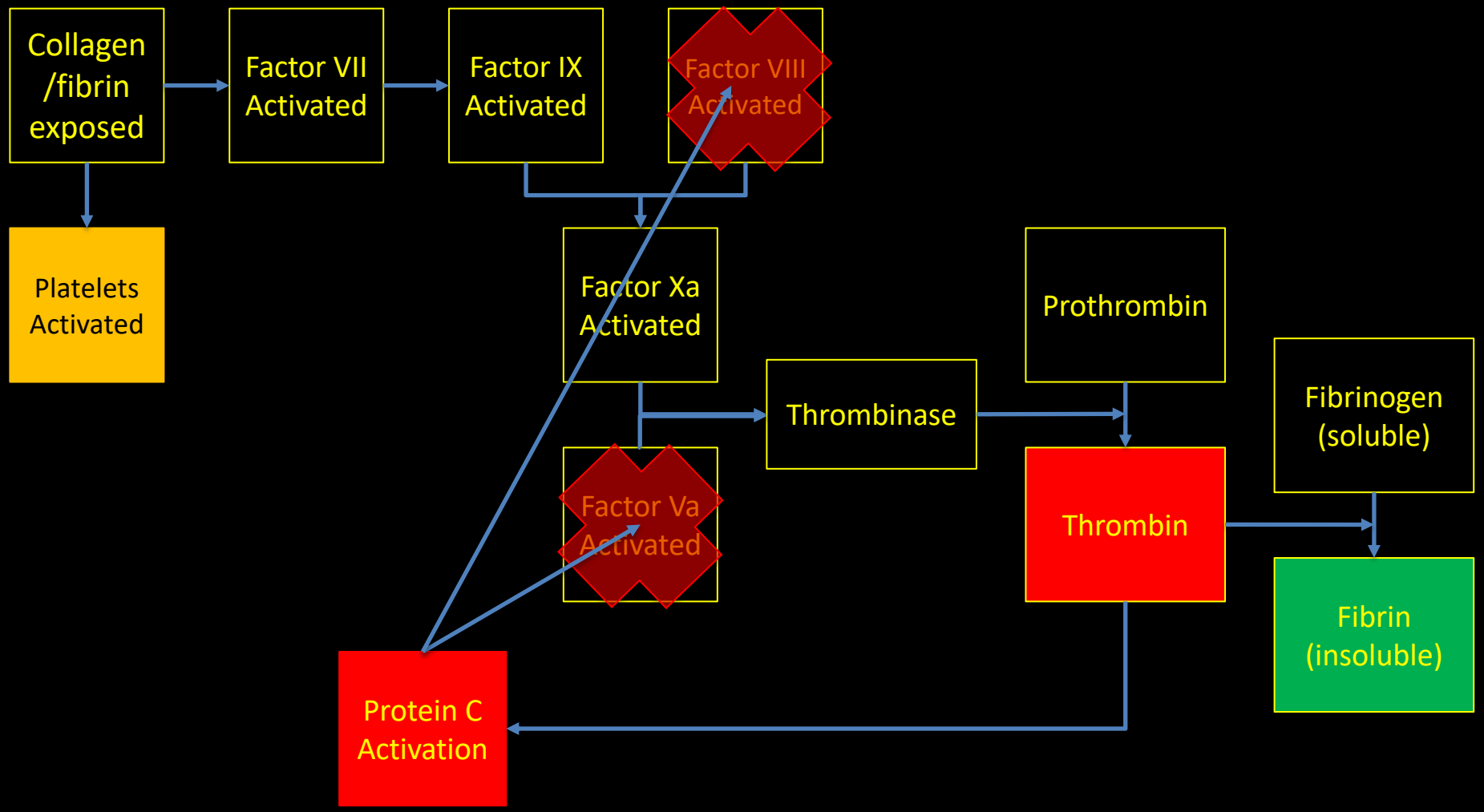
Lets form a Thrombus

- 1 ml of blood can generate enough thrombin to convert all the fibrinogen in the body to fibrin
- Tight regulation therefore required
- Balance of procoagulant and anticoagulant forces

Lets form a Thrombus-Regulation



Lets form a Thrombus-Regulation



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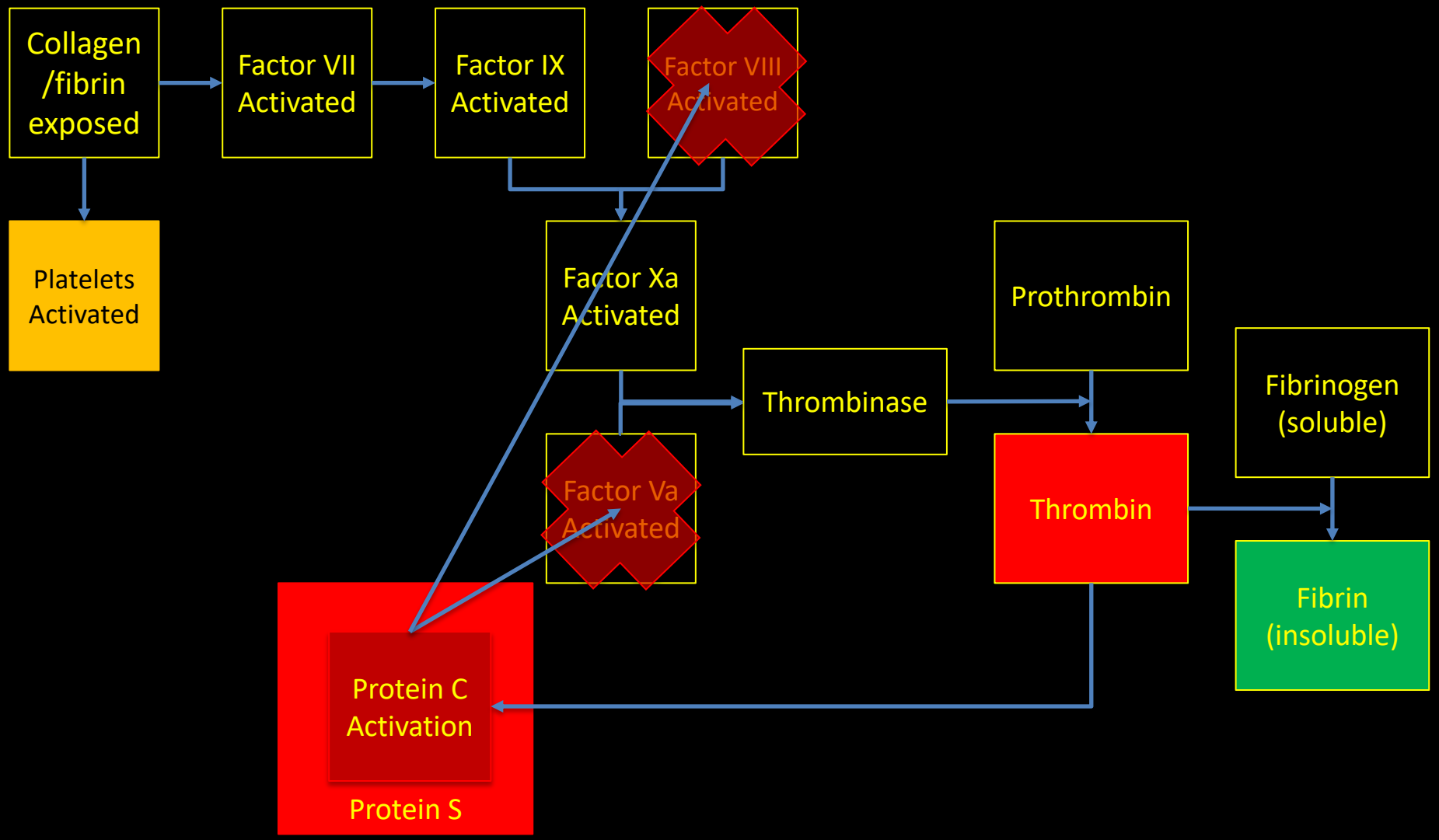
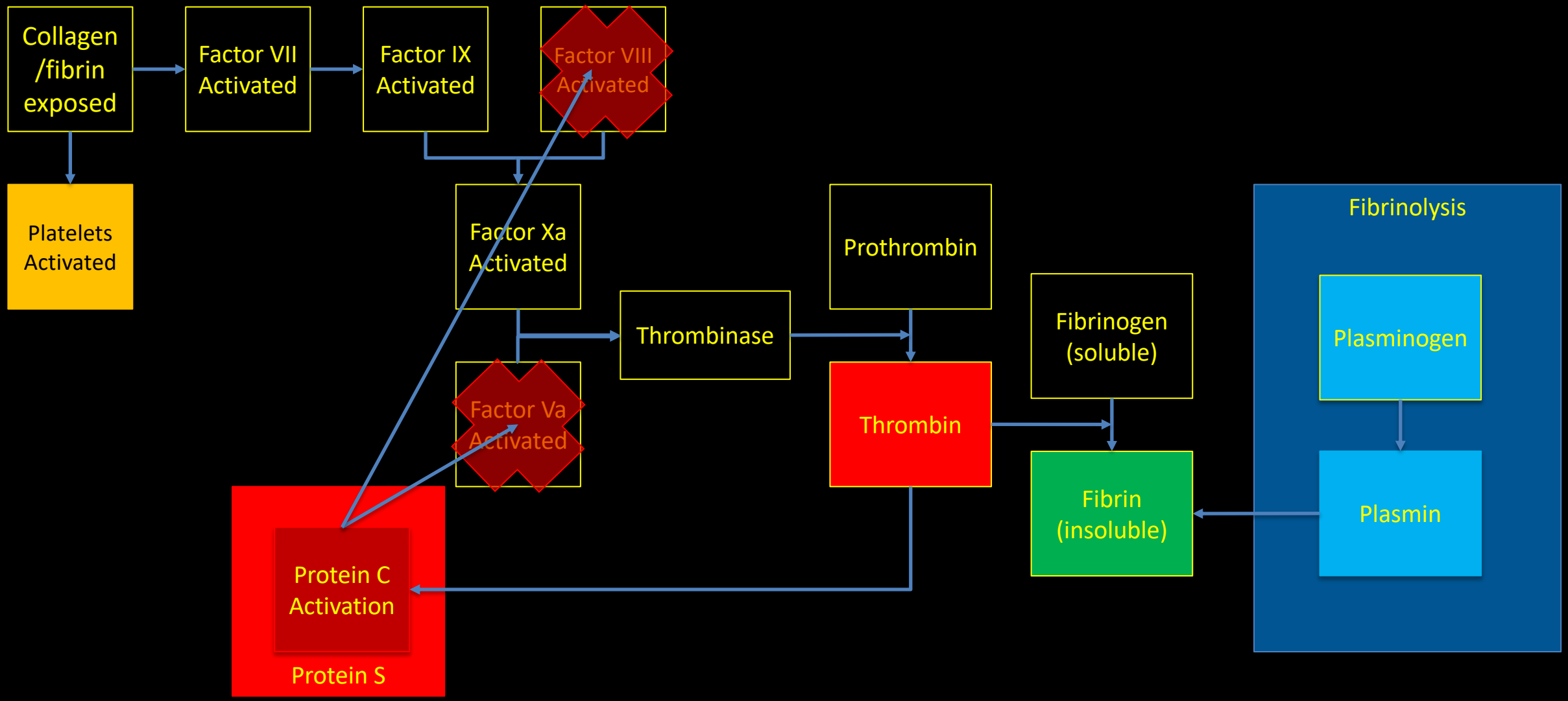


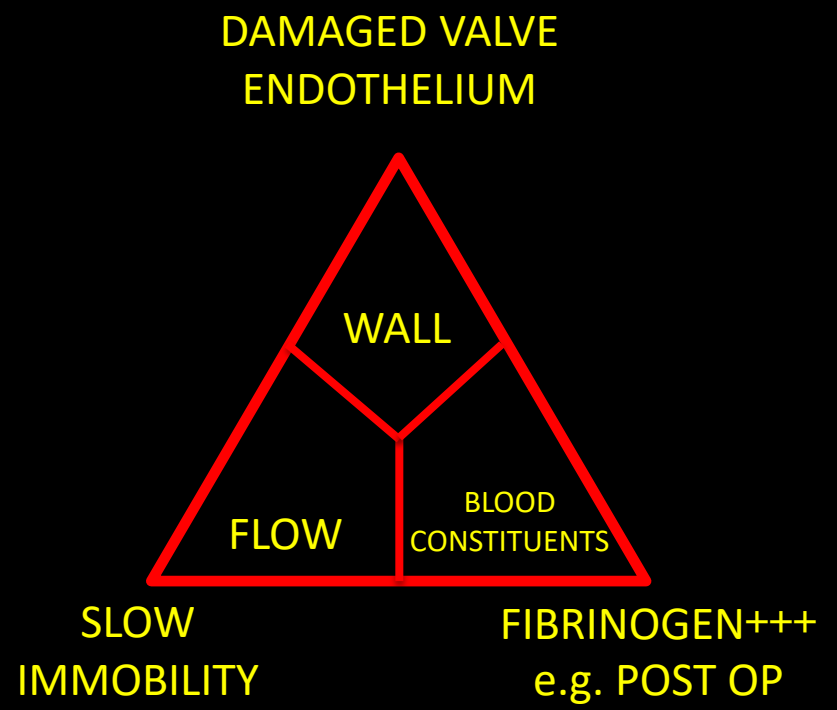
Lets form a Thrombus-Regulation



VENOUS THROMBOSIS: AETIOLOGY

Causes of venous thrombosis can be considered under Virchow's triad.

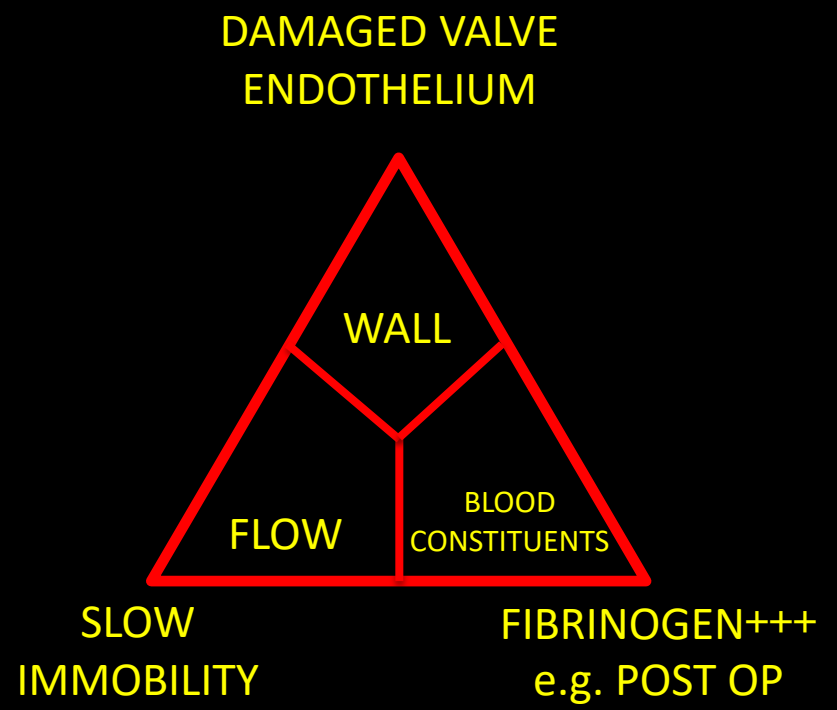
The most important site of venous thrombosis is in the deep veins of the leg.



VENOUS THROMBOSIS: AETIOLOGY

Causes of venous thrombosis can be considered under Virchow's triad.

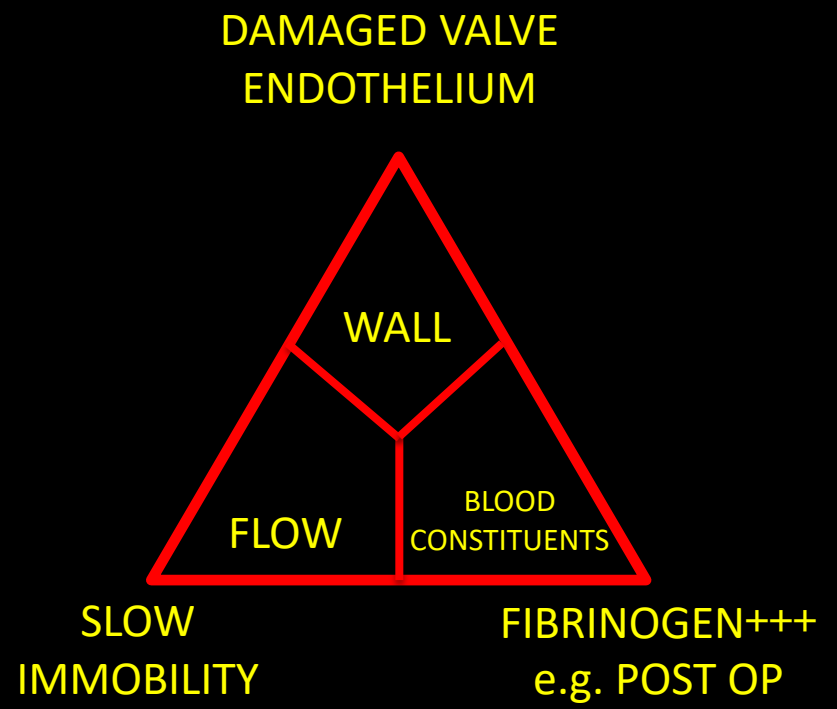
After operations, injury or severe illness of many kinds fibrinogen and other coagulation factors in the blood are increased due to increased hepatic synthesis. This leads to an increased risk of deep vein thombosis.



VENOUS THROMBOSIS: AETIOLOGY

Causes of venous thrombosis can be considered under Virchow's triad.

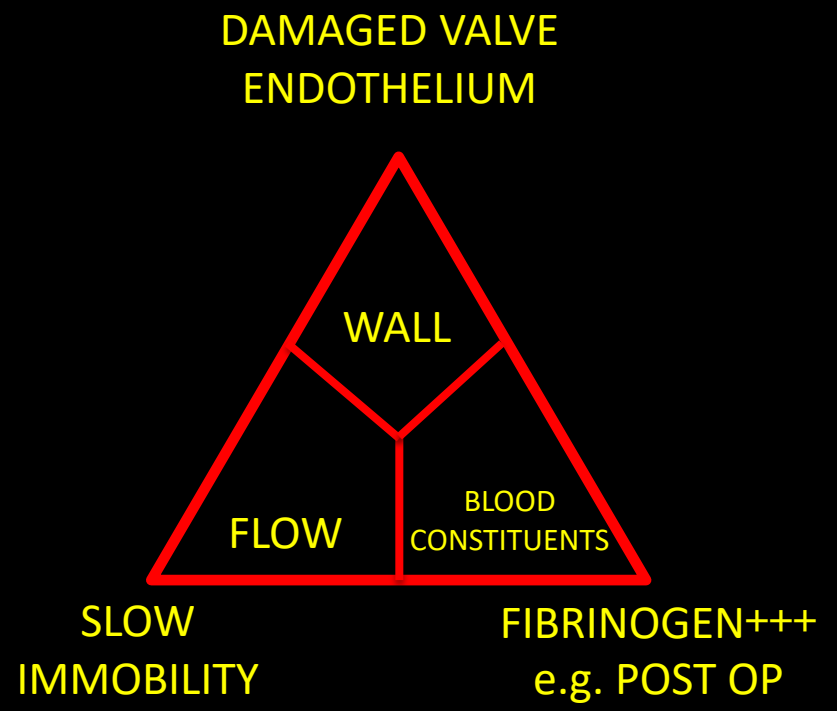
Slow blood flow promoted by immobility due to chronic illness, or bed rest post-operatively can promote venous thrombosis.



VENOUS THROMBOSIS: AETIOLOGY

PREDISPOSING FACTORS FOR DEEP VENOUS THROMBOSIS

Immobility, bed rest
Post op coagulability changes
Pregnancy
OC pill
Severe burns and trauma
Cardiac failure
Disseminated malignancy
Economy class syndrome



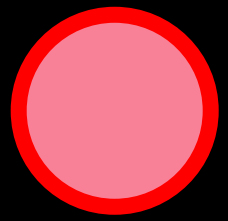
Lets form a Thrombus?

Thrombi can occlude a vessel which may result in necrosis of the part served (infarction).

Mural thrombus can release fragments (emboli) which can travel in the bloodstream to block distal vessels.

Thrombus on heart valves due to infection can also embolise.

Occlusive

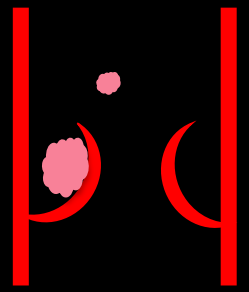


Infarction

Mural

Embolism

Vegetation

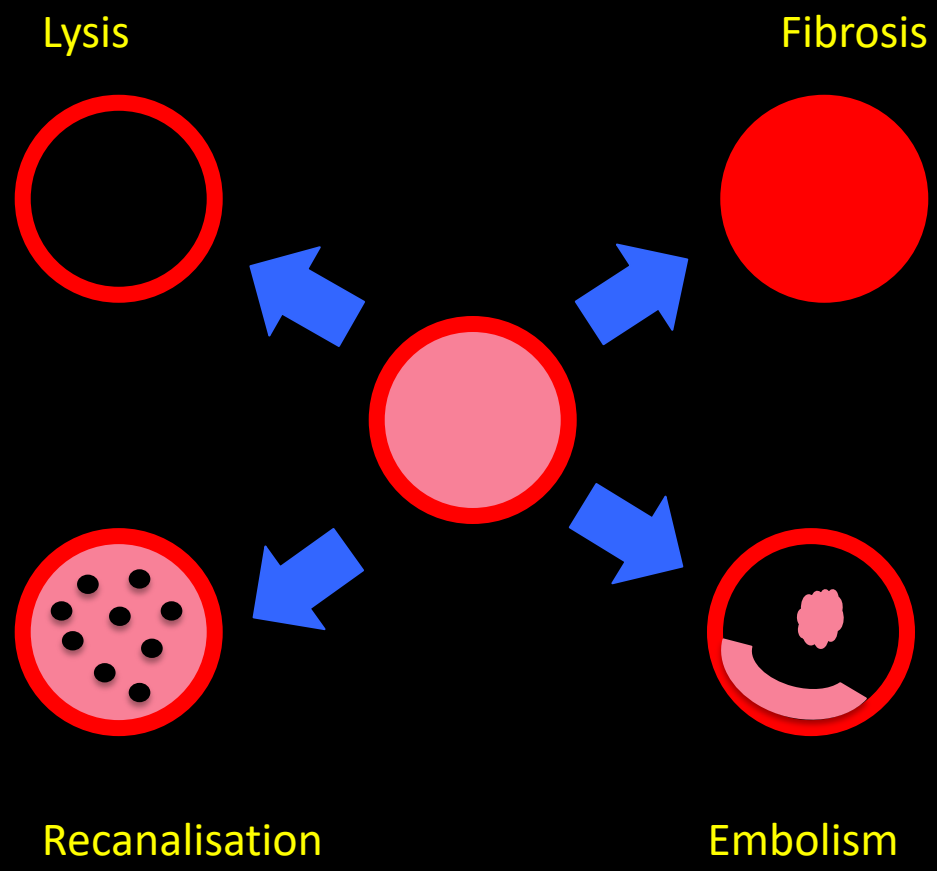


Embolism

OUTCOMES OF THROMBOSIS 1

THROMBOLYSIS

Thrombosis can be cleared by the fibrinolytic system. Plasminogen activator released from endothelial cells converts plasminogen to plasmin which dissolves fibrin.

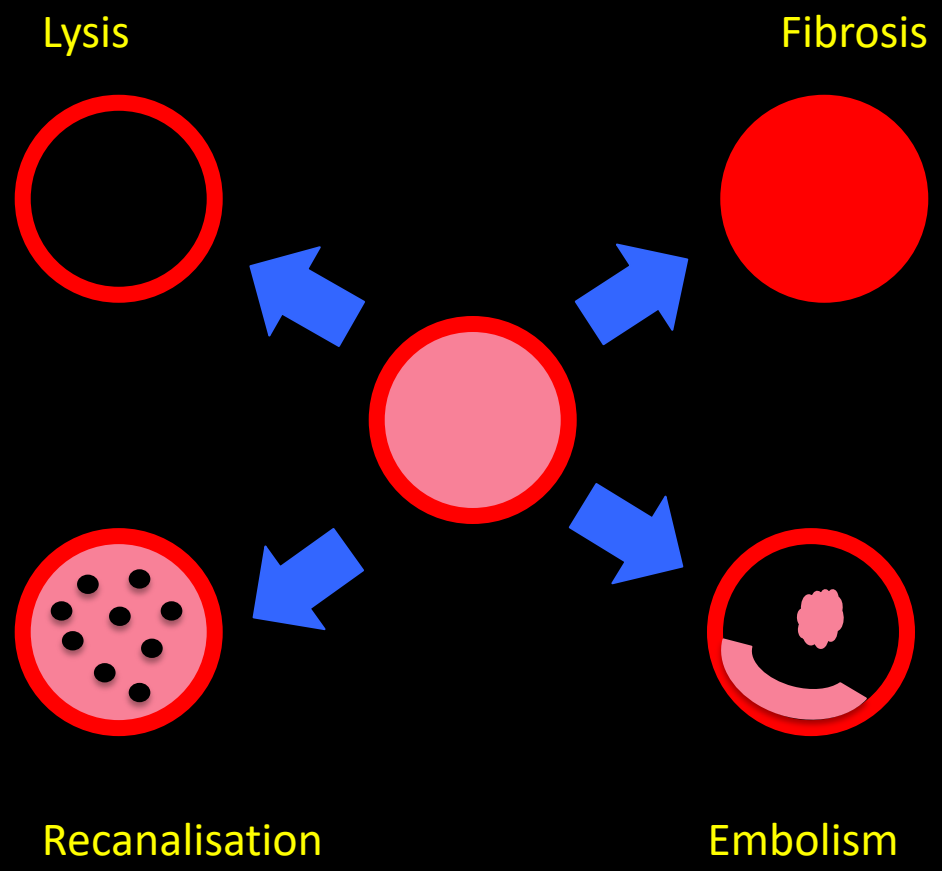


OUTCOMES OF THROMBOSIS 2

RECANALISATION

Thrombosis can undergo recanalisation.

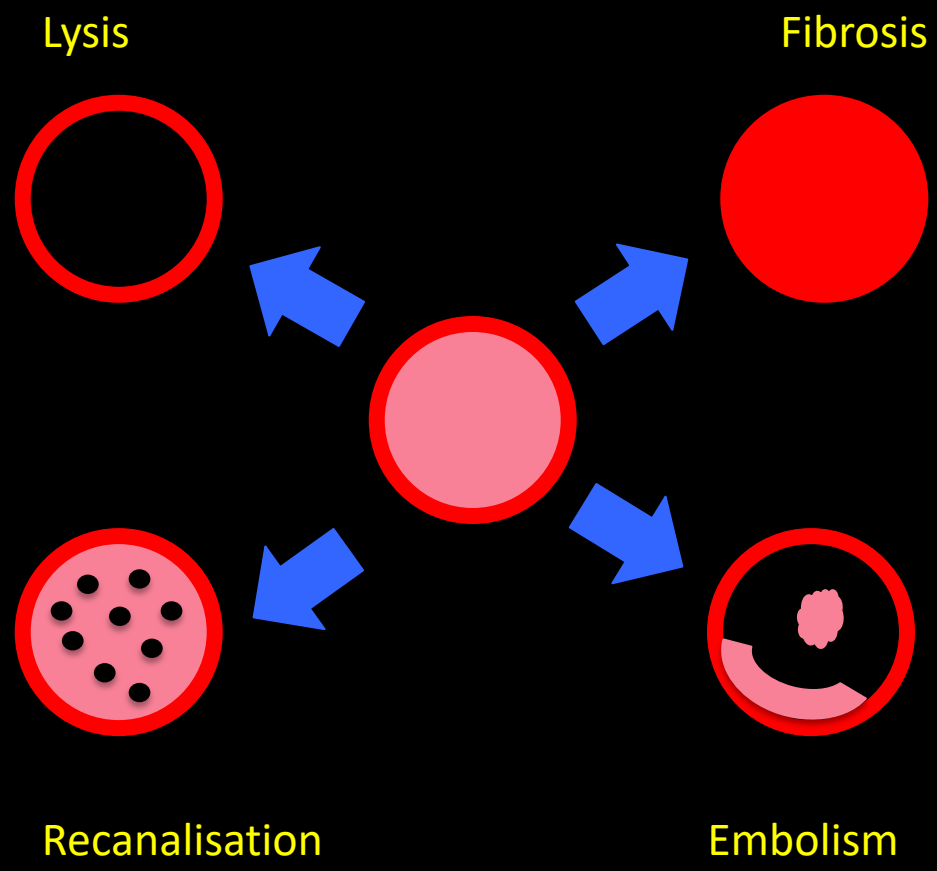
Endothelial cells grow out from the vessel wall and create new channels through the thrombus:



OUTCOMES OF THROMBOSIS 3

EMBOLISM

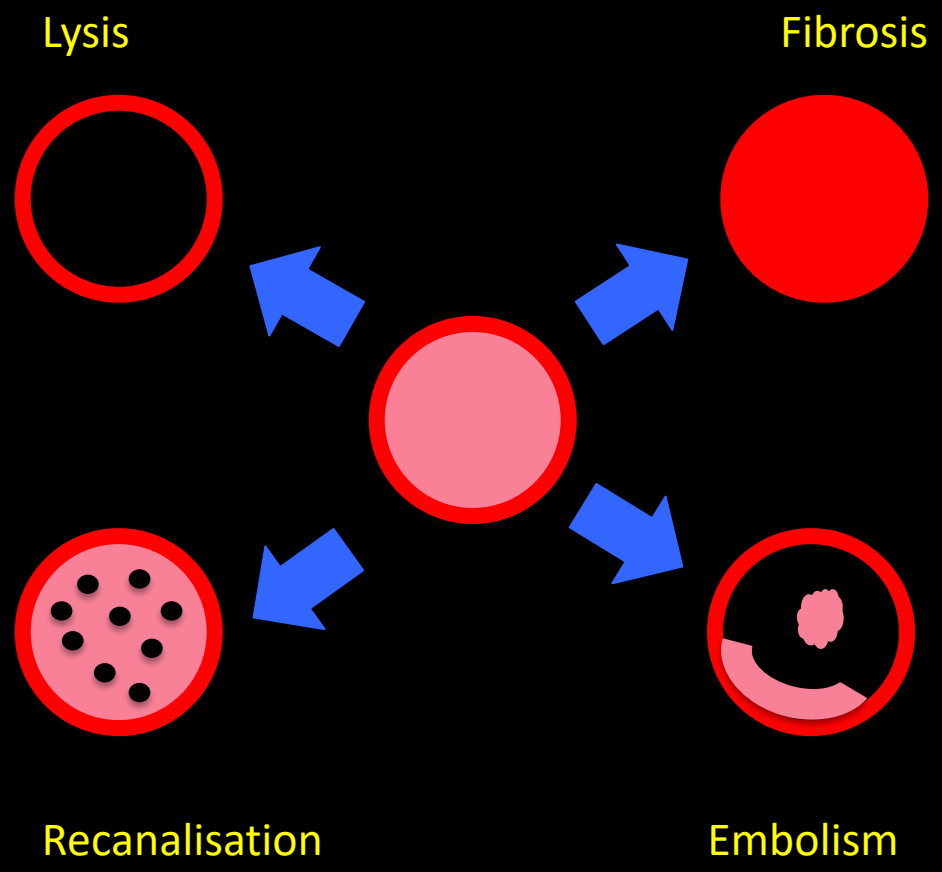
Thrombosis can throw off emboli which can occlude distal vessels



OUTCOMES OF THROMBOSIS 4

FIBROSIS: ORGANISATION

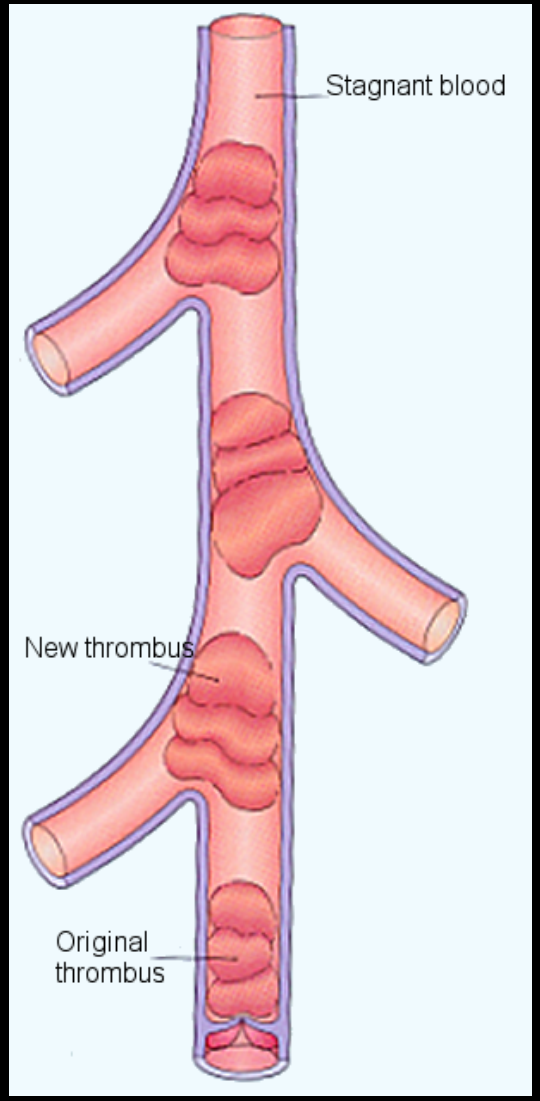
Thrombosis can simply be organised i.e undergo fibrous tissue replacement



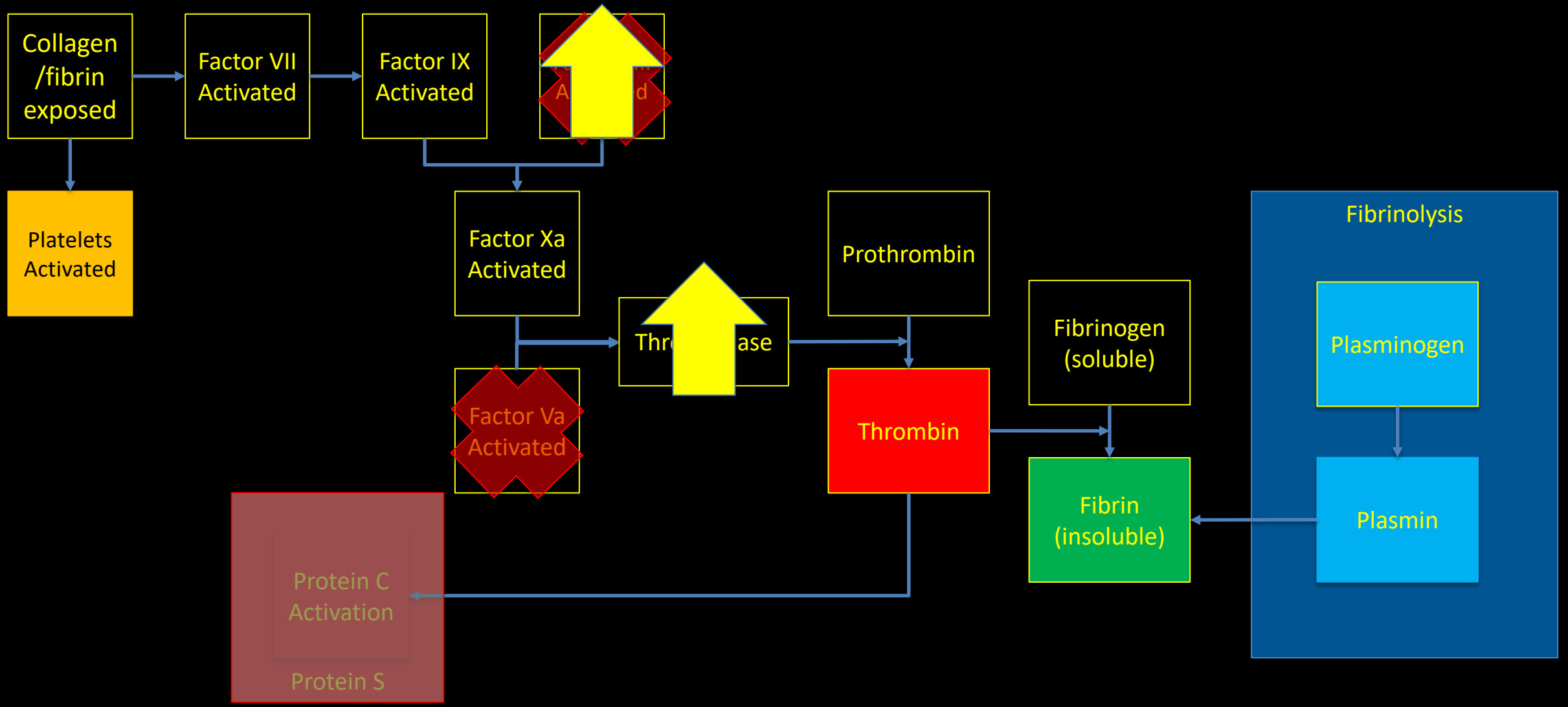
OUTCOMES OF THROMBOSIS 5

Propagation

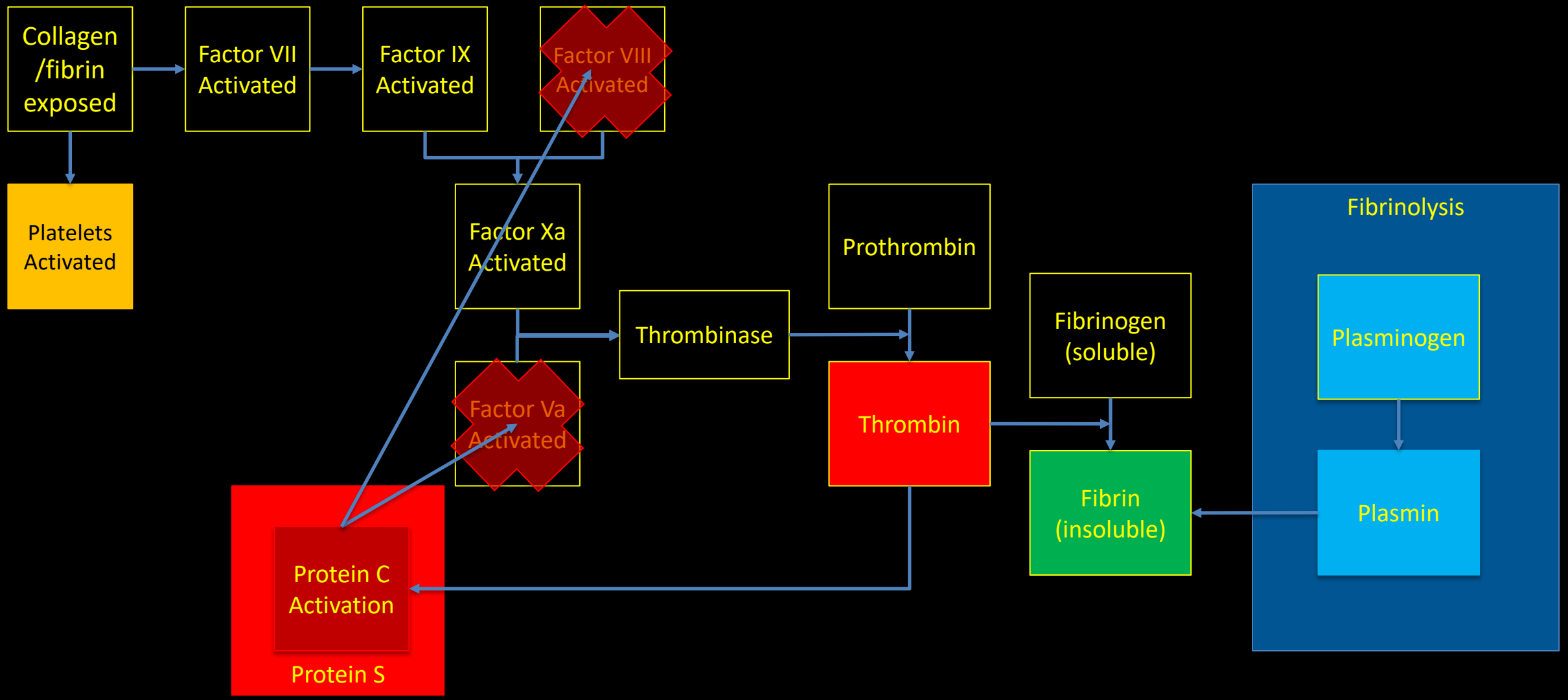
progressive spread
of thrombosis
distally in arteries
proximally in veins



Lets form a Thrombus-Malfunctions



Lets NOT form a Thrombus-Treatment



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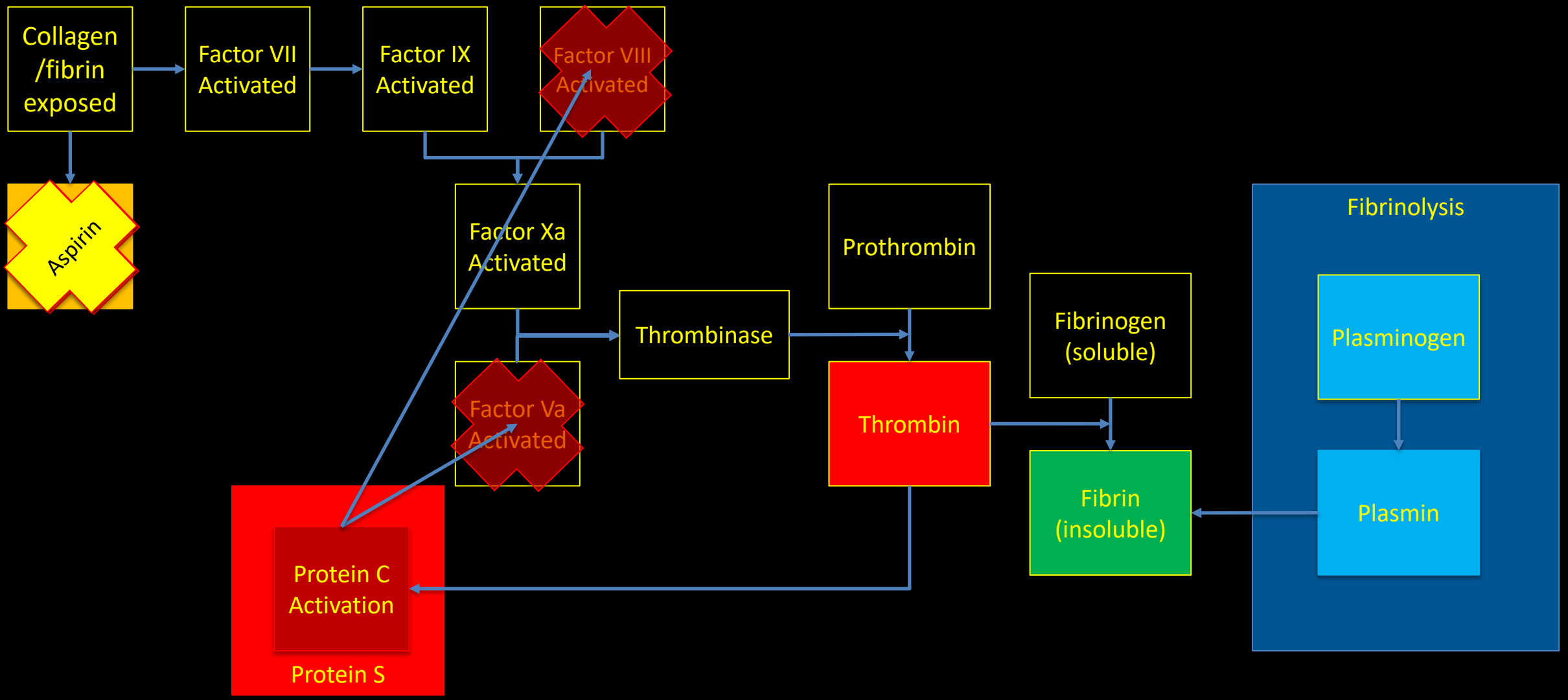
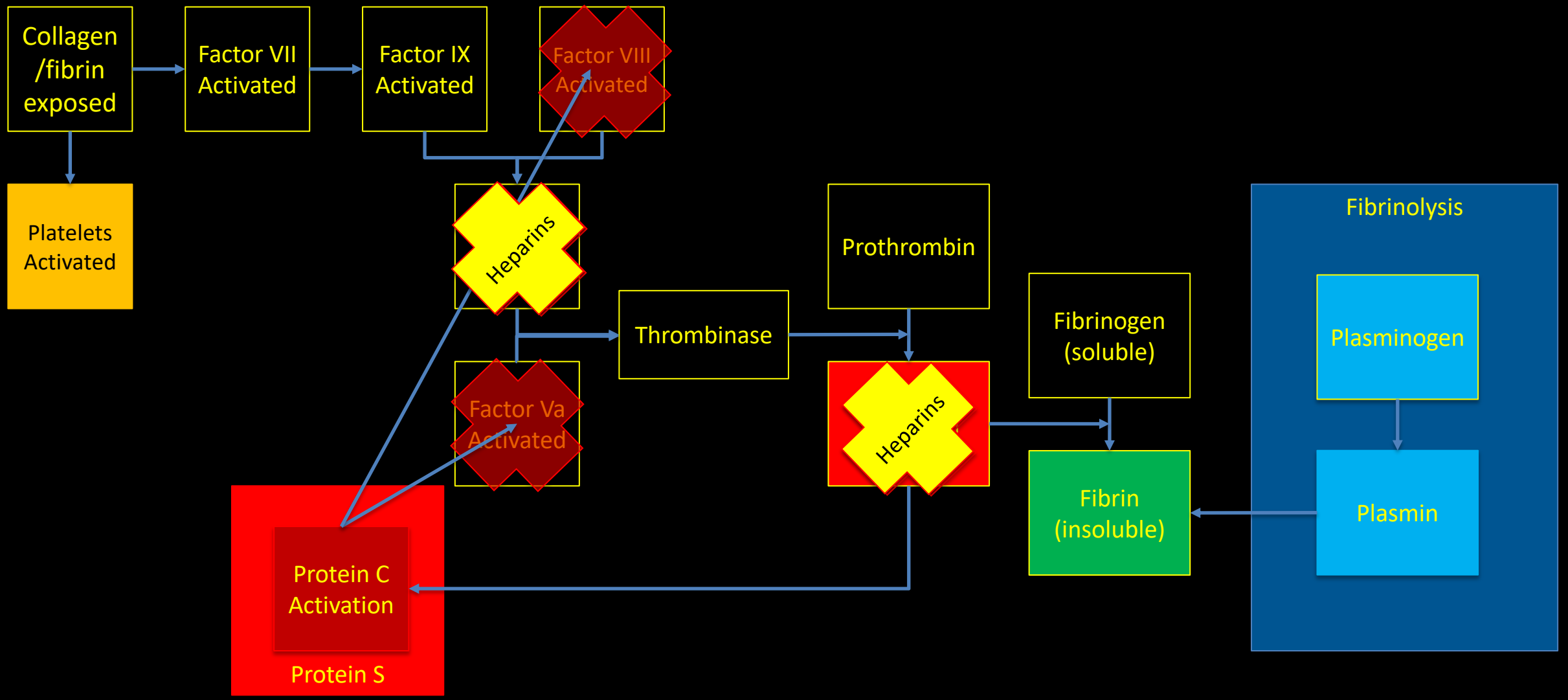


Lets NOT form a Thrombus-Treatment



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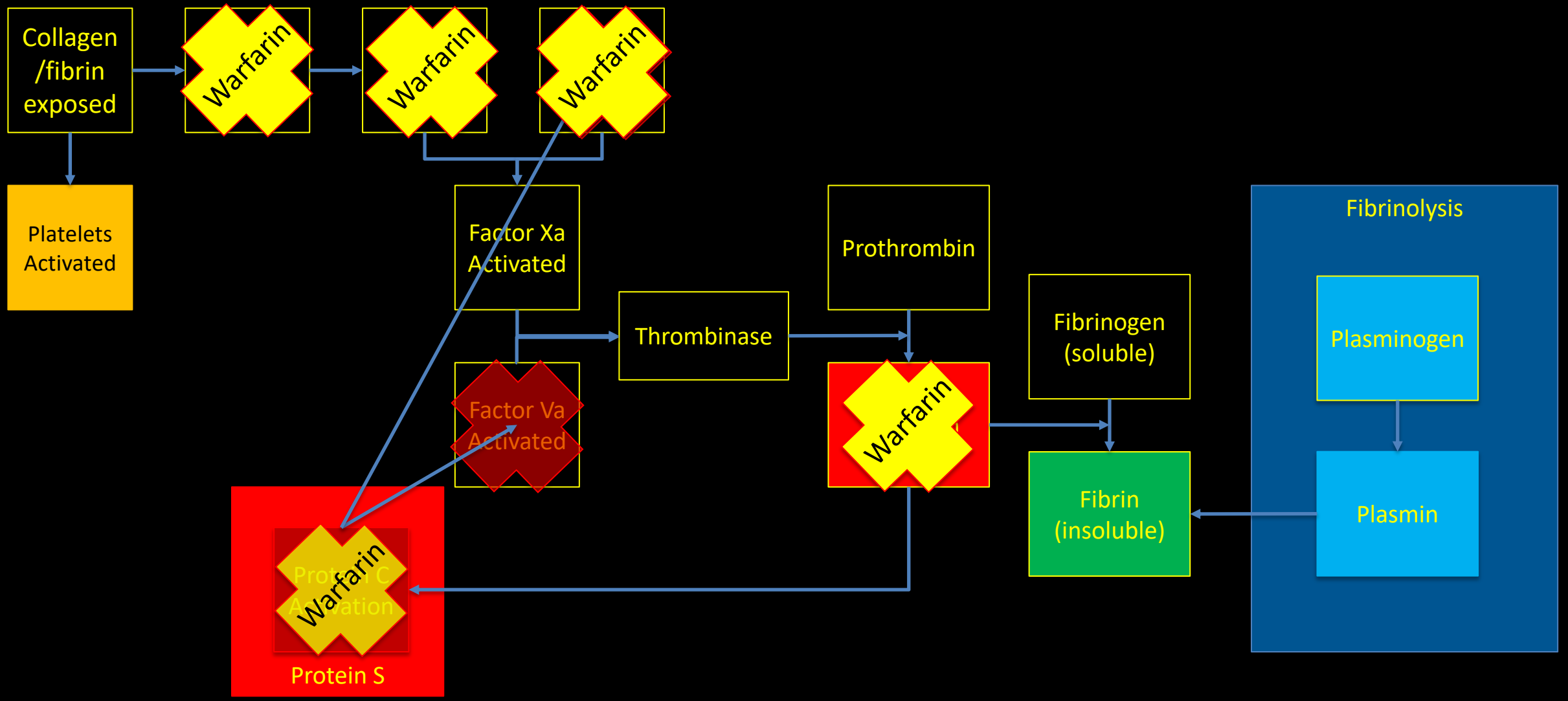
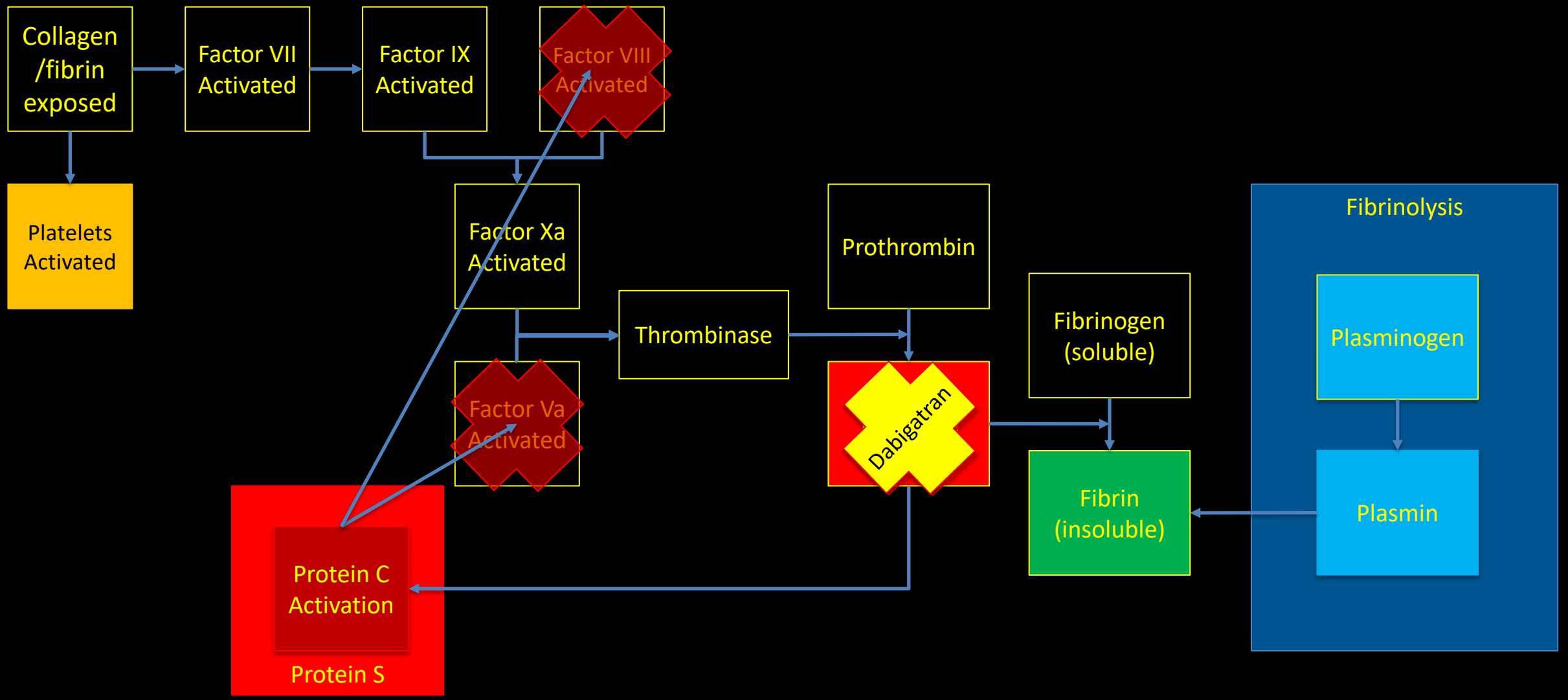
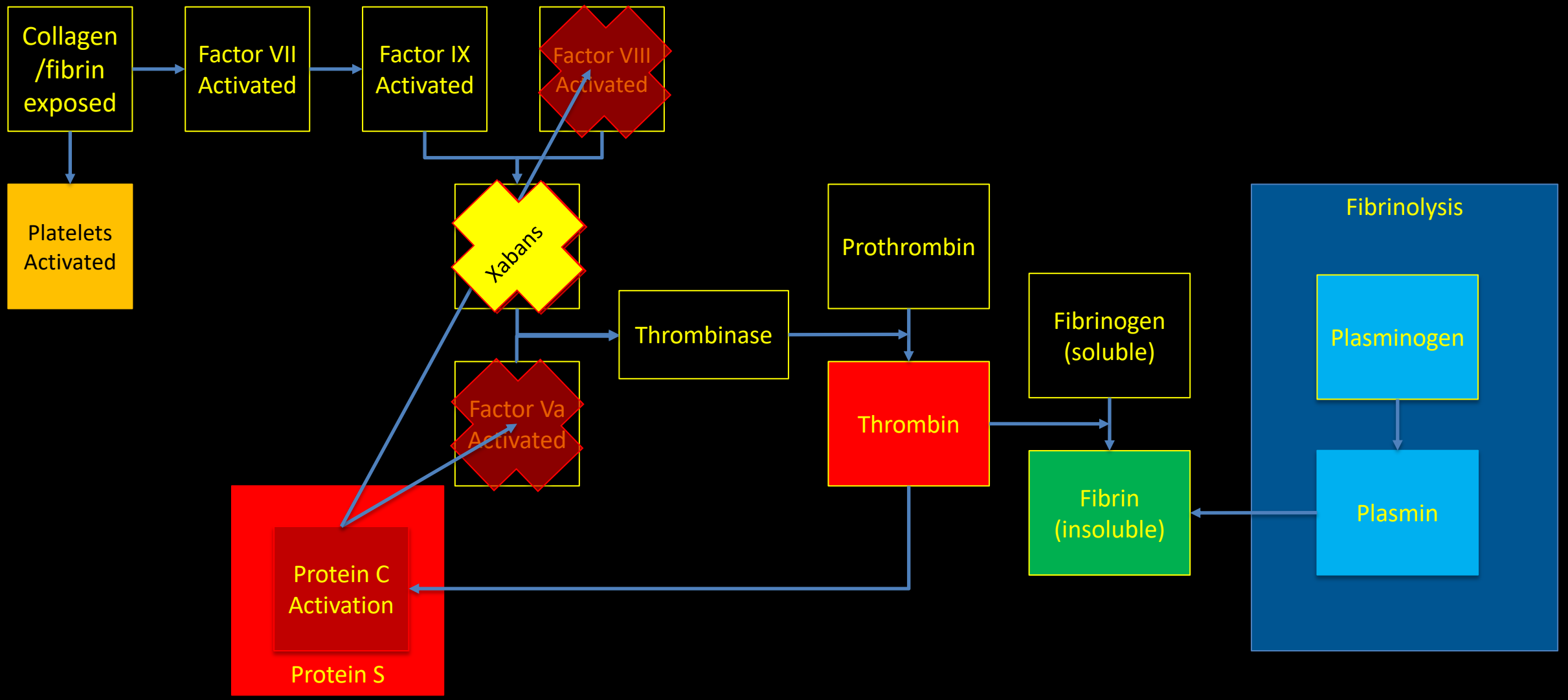


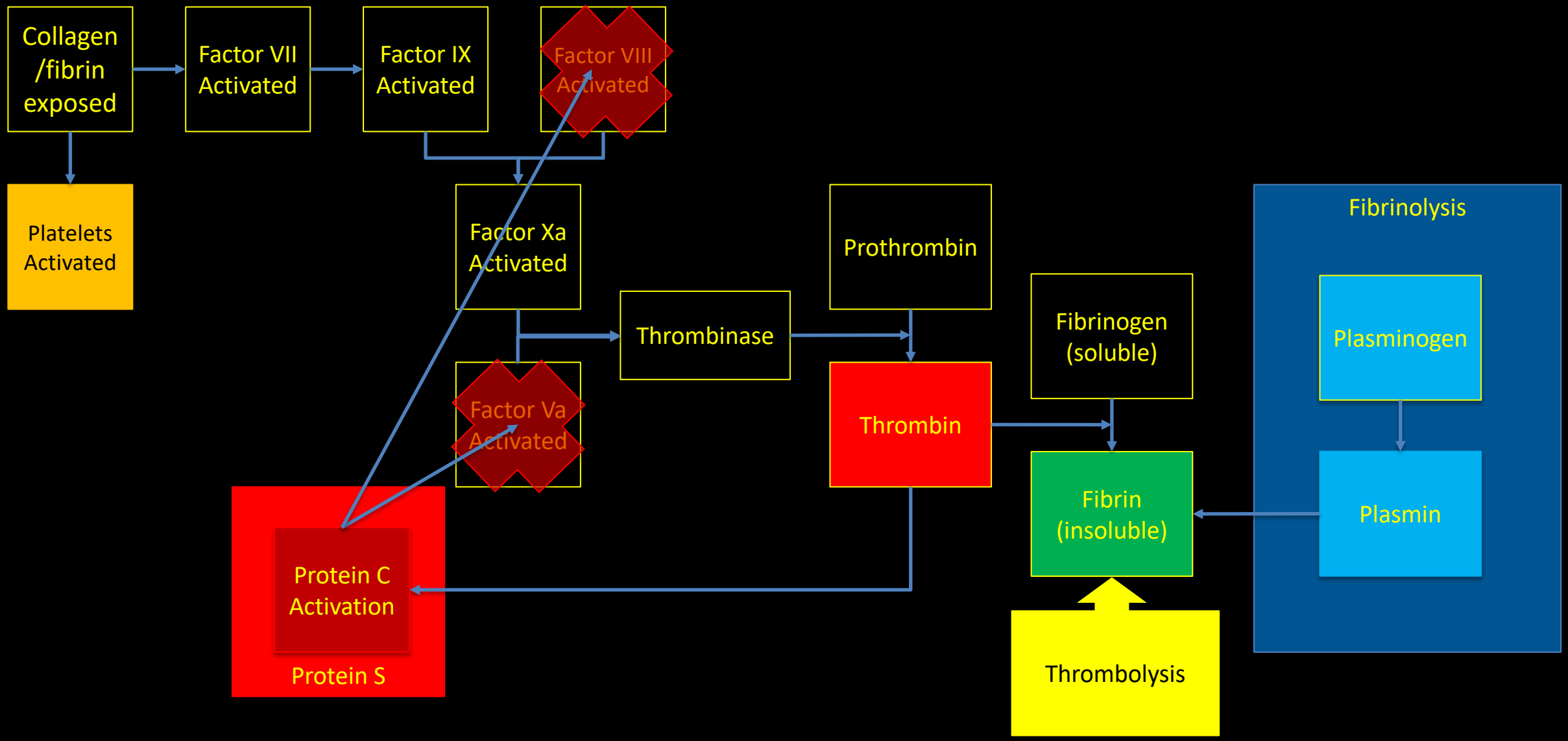
Lets NOT form a Thrombus-Treatment



Lets NOT form a Thrombus-Treatment



Lets NOT form a Thrombus-Treatment



What is a blood clot-Summary

Is a vital part of our system that keeps the blood in the pipes

Lets NOT form a Thrombus-Treatment

Cause
be cor
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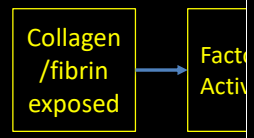
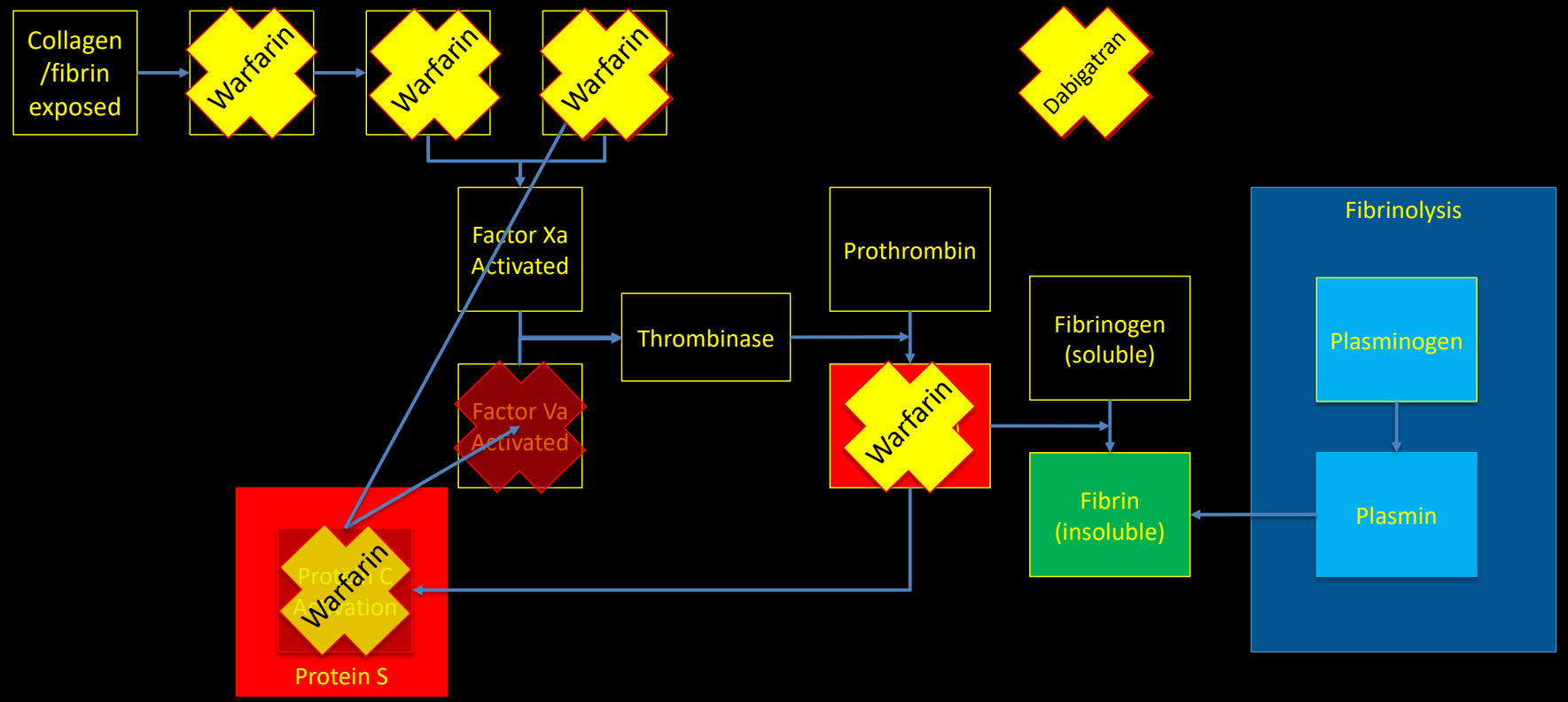
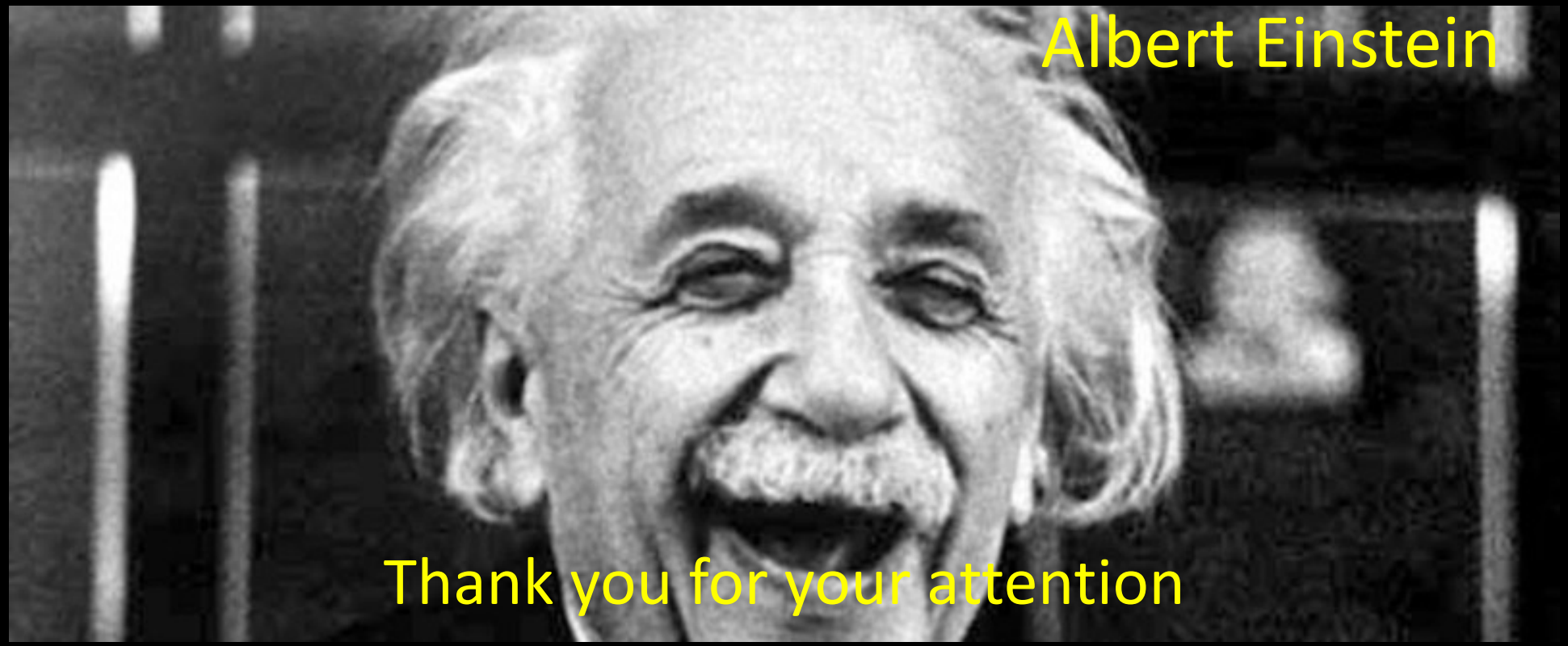




The important thing is not to stop questioning. Curiosity has its own reason for existing



Thank you for your attention

Questions?

matthew.fay@bradford.nhs.uk

Thrombosis and Women's Health

Risk factors, contraceptive pill, HRT and your doctor

Dr Matthew Fay

GP Principal The Willows Medical Practice- Queensbury

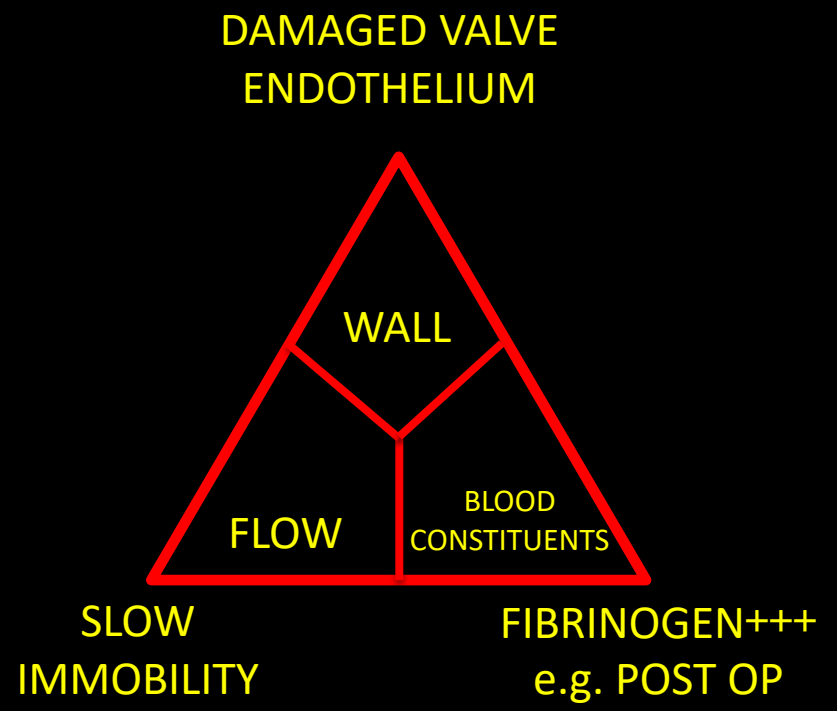
GPwSI and Co-Founder Westcliffe Cardiology Service

GP Partner Westcliffe Medical Group

VENOUS THROMBOSIS: AETIOLOGY

PREDISPOSING FACTORS FOR DEEP VENOUS THROMBOSIS

Immobility, bed rest
Post op coagulability changes
Pregnancy
OC pill
Severe burns and trauma
Cardiac failure
Disseminated malignancy
Economy class syndrome



Deep vein thrombosis

- Incidence of VTE 2-3 per 1000
- Incidence is higher in men than in women (above the age of 45).
  - Overall adjusted incidence:
    - Men is 130 : 100,000
    - Women 110: 100,000
    - Men : Women is 1.2 : 1.0

Risk Factors

- Illness or injury that causes prolonged immobility increases the risk of a DVT
- Age >40 years (VTE risk increases with advancing age)
- Contraceptive pills and hormone replacement therapy
- Cancer and its treatment
- Major surgery (example: abdomen, pelvis, or hip or knee replacement)
- Obesity
- Previous DVT or PE
- A family history of blood clots
- Certain heart problems
- Varicose veins
- Faulty blood clotting is an uncommon cause
  - an example is an inherited condition that causes the blood to clot more easily than usual (factor V Leiden)

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Oral Contraceptives-Combined Pill

- 20, 30 or 35 micrograms of ethinyloestradiol
- Different progestogens
- 21 day and every day formulations
- Fixed dose or phasic
- 4 or 12 week withdrawal
- Continuous pill

Oral Contraceptives-Combined Pill

- Advantages
  - Suppress ovulation
  - High efficacy
  - Give predictable ‘periods’
- Disadvantages
  - Increased risk of thrombosis
  - Hypertension in some

Oral Contraceptives-Combined Pill

- Can we reduce risk by Reducing Dose?

Oral Contraceptives-Combined Pill

- Loss of efficacy
- Loss of cycle control (depends on both oestrogen and progesterone)
- Wide range of blood levels via oral route

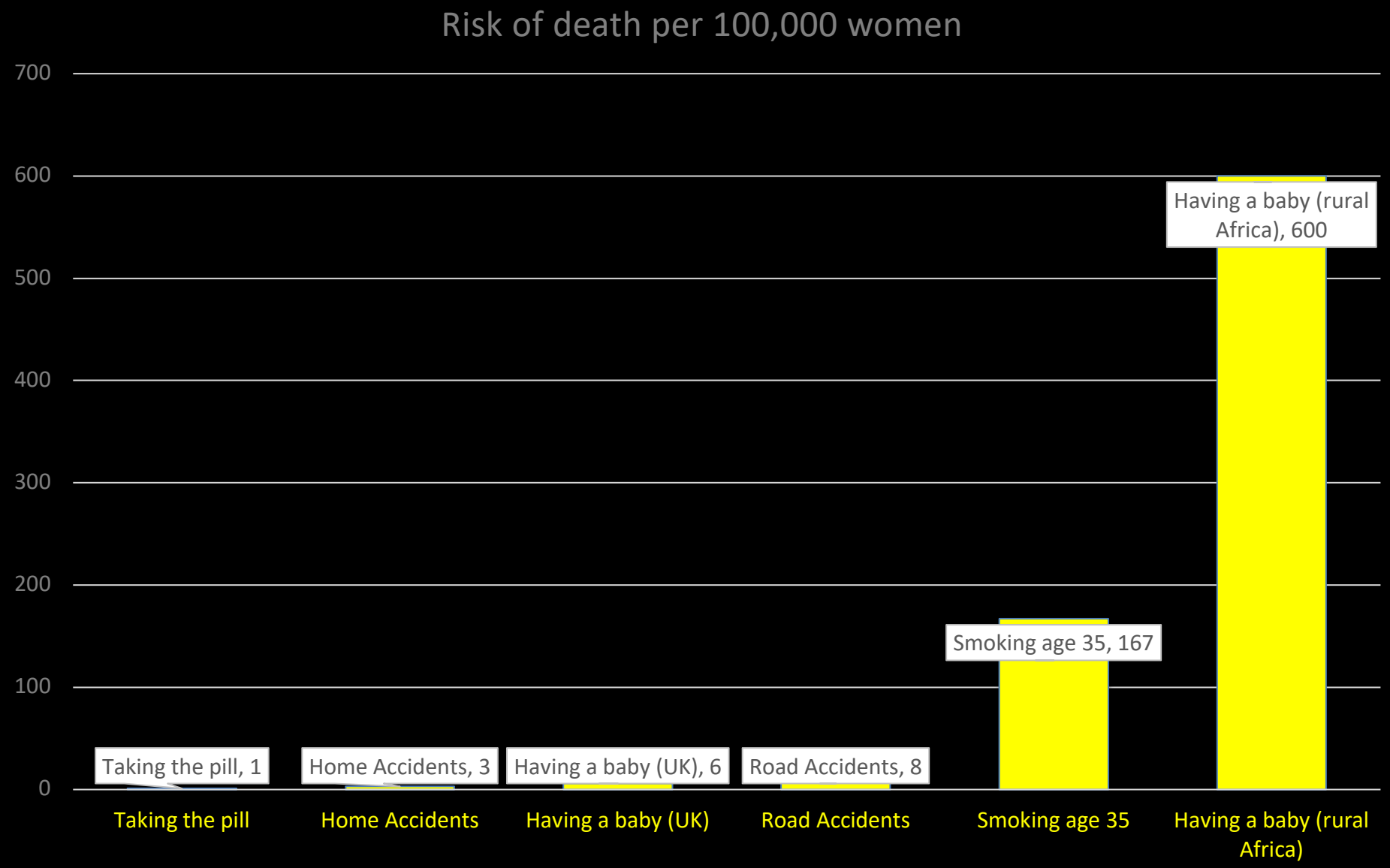
Oral Contraceptives-Combined Pill-Risk

- VTE risk in data sheets:

  15 per 100,000 - second generation

  25 per 100,000 - third generation

Oral Contraceptives-Combined Pill-Risk



Progestogen-only methods

- Advantages
  - Greater safety
- Variable efficacy (from extremely low to better than COC)
- Some measure of loss of cycle control (varies with route, type and dose)

Routes available

- Progestogen-only pill (POP)
- Emergency contraception (Levonelle)
- Injectable (Depo-Provera)
- Intrauterine (Mirena)
- Implant (Implanon)

Desogestrel Progesterone only pill

- 75 micrograms Desogestrel
- Suppresses ovulation
- Lower failure rate
- Different rules for missed pills

Emergency Contraception

- Products
  - Levonelle One Step
  - Any copper IUD, including GyneFix
- Indications
  - Unprotected sex
  - Potential barrier failures
  - Potential pill failure
    - 2 missed pills in first week
    - 4 missed pills in mid-packet
  - Potential IUD failure
  - Increased risk of ectopic in failures

- Awareness of risk may not translate into action

Levonelle One Step

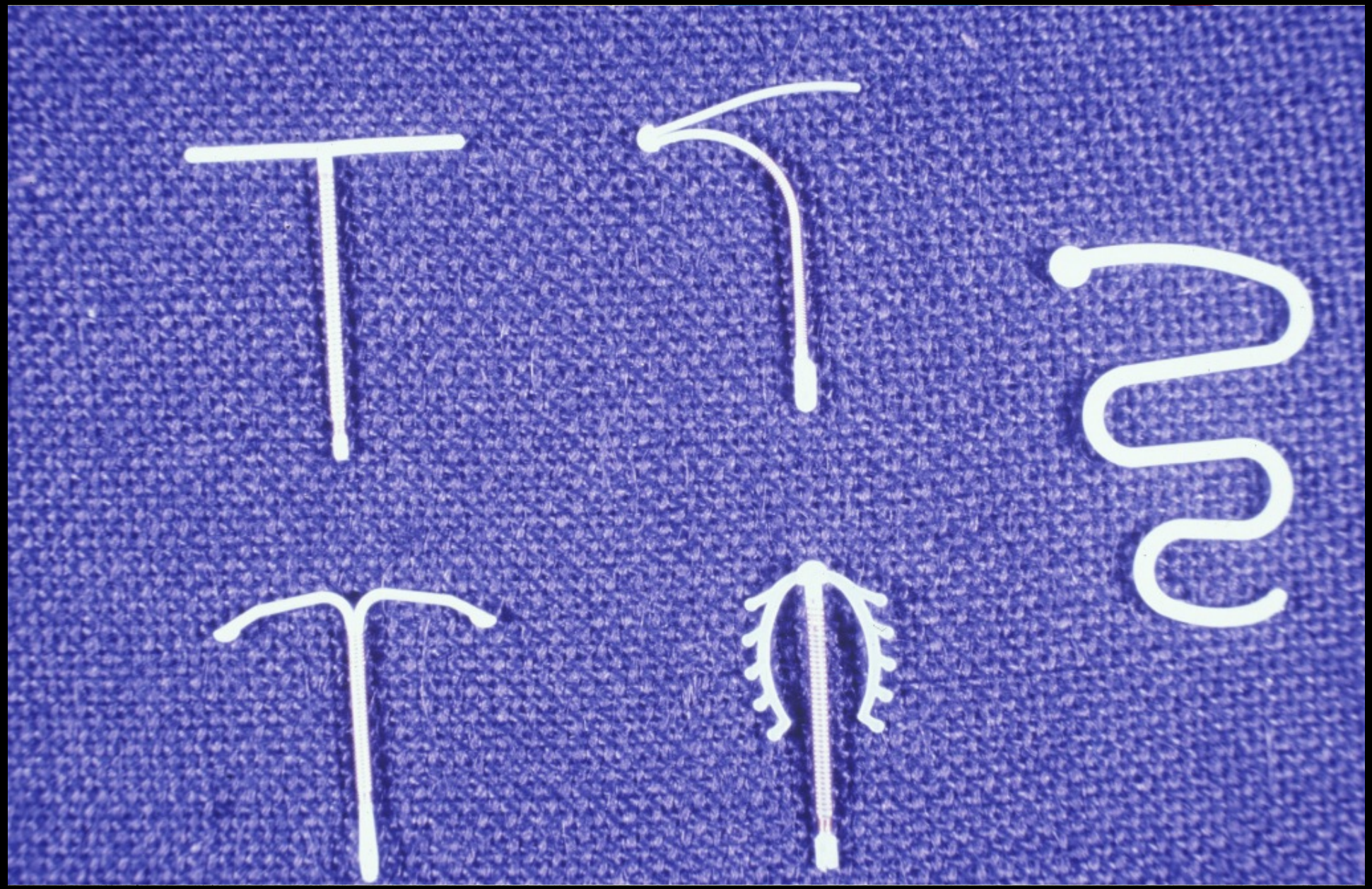
- 1500 micrograms levonorgestrel
- Within 72 hours
- Efficacy
  - < 24 hours 95 %
  - 24-48 hours 85 %
  - 49-72 hours 58 %

Emergency Hormonal Contraception (EHC)

- Side effects
  - 23 % nausea
  - 6 % vomiting
- Contraindications
  - Established pregnancy

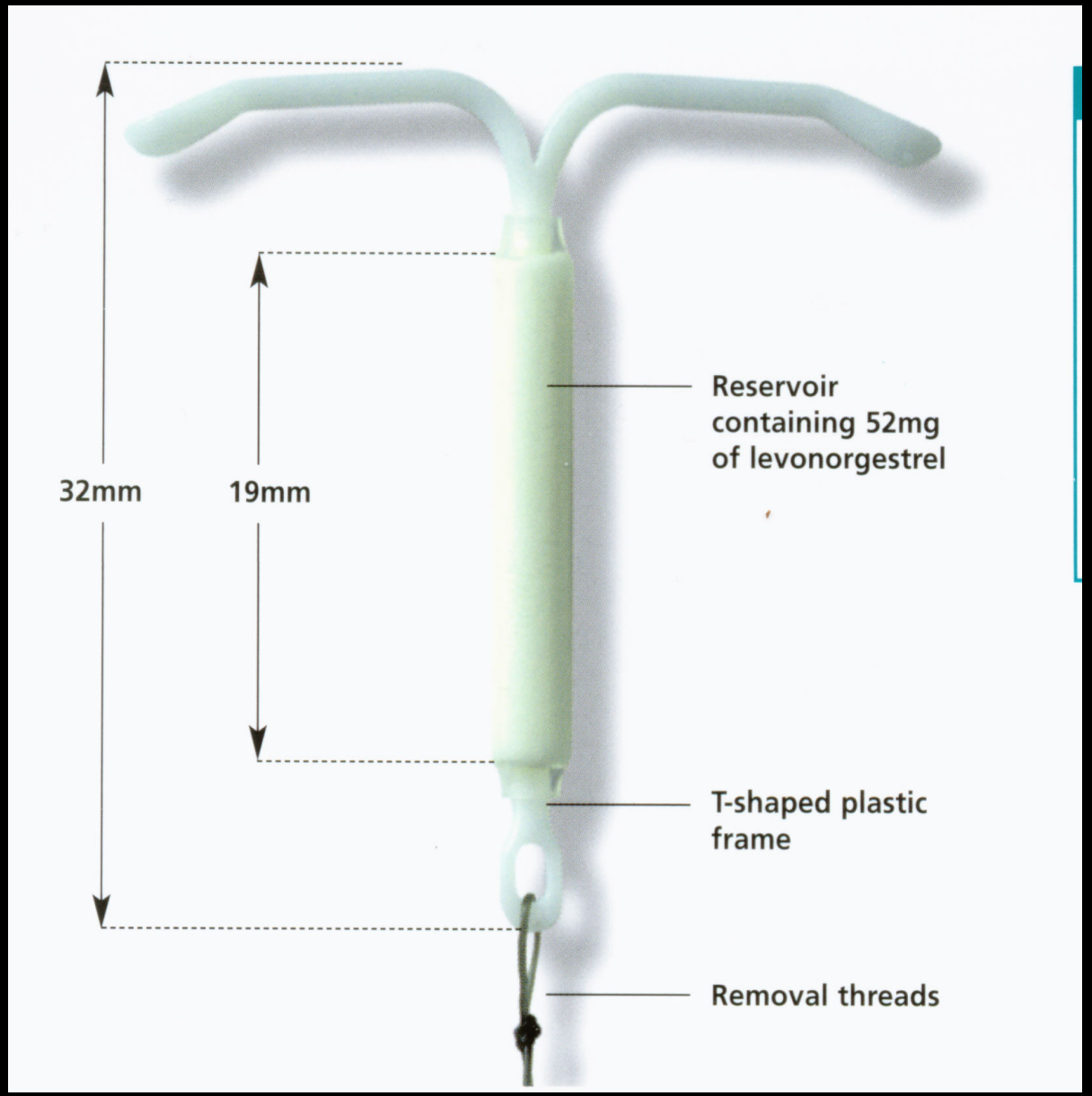
Depo-Provera

- 150 mg medroxyprogesterone acetate
  - IM
  - Every 12 weeks
  - Failure rate approx 0.5%
  - High incidence of amenorrhoea
  - Long-term use associated with reduced bone density which recovers with addback or discontinuation



IUD (Copper devices)

- Gold standard Copper T 380
- Not user-dependant
- Good efficacy (failure rate 1% or less p.a.)
- Requires insertion and removal
- Some increased risk of infection in first 60 days especially when cervix colonised
- Periods may be heavier, longer, more painful


32mm
19mm
Reservoir containing 52mg of levonorgestrel
T-shaped plastic frame
Removal threads

Intrauterine

- Mirena releases 20 mcg levonorgestrel daily for 5 years
- Failure rate equal to or less than female sterilisation
- Reduction in menstrual loss a beneficial side-effect

Mirena

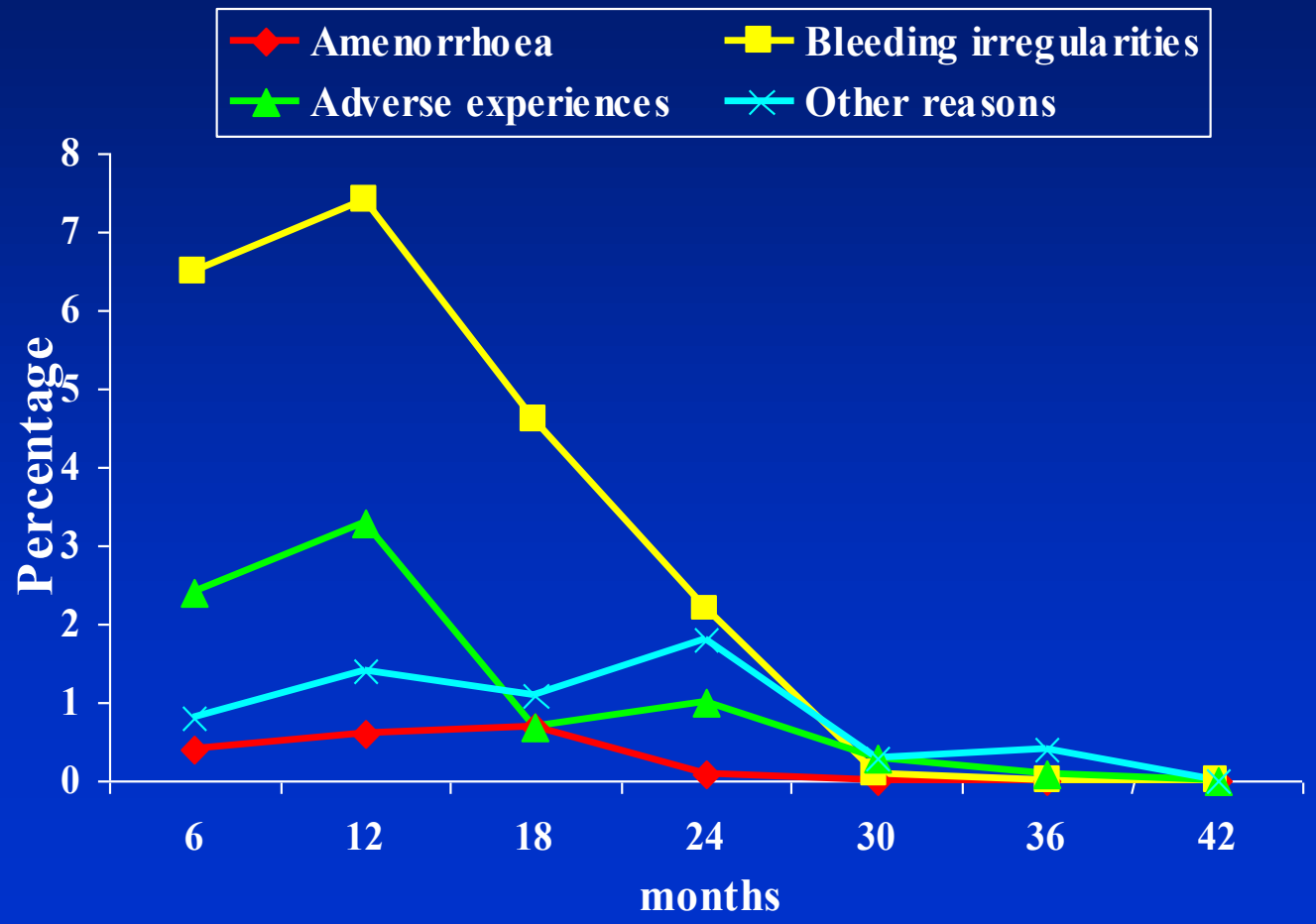
- Good contraception
- Control of menorrhagia
- May help dysmenorrhoea
- Effective endometrial protection

- Some systemic absorption
- Irregular bleeding may persist
- Insertion not always easy

Implanon

- Subdermal
- Etonogestrel
- Menstrual irregularity common
- Failure rate far below that of sterilisation

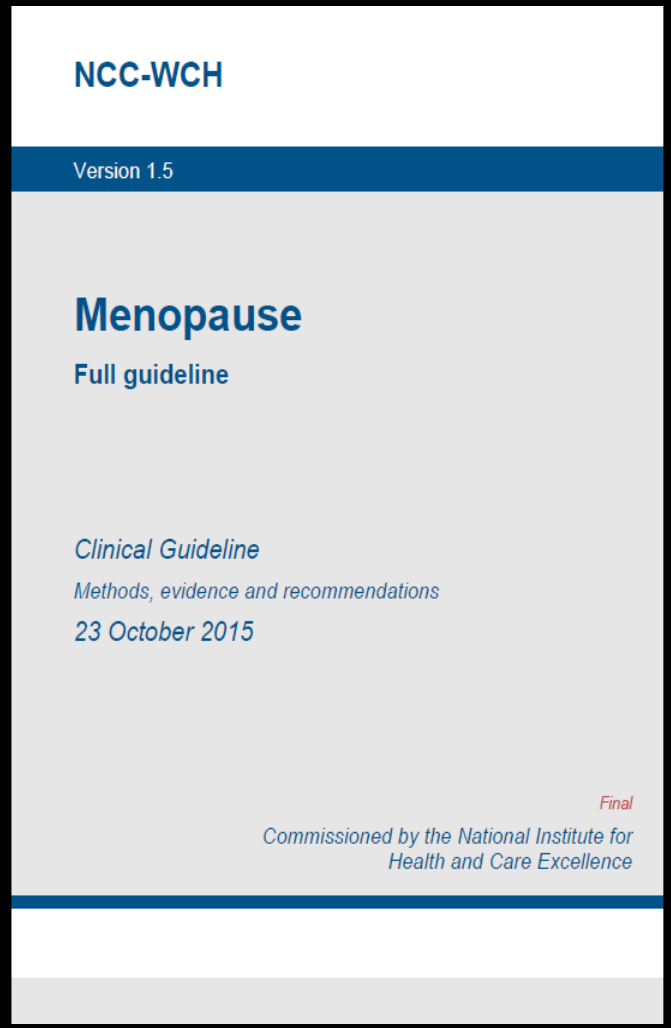
Discontinuation rates with Implanon® (n=720)



Summary

- Combined pill increases the VTE risk
- There are many choices
- Many use Desogestrel first line now
- GPs would prefer ‘LARCs’
  - Long Acting Reversible Contraception

Hormone Replacement Therapy for Menopausal symptoms



Hormone Replacement Therapy for Menopausal symptoms

- Diagnosis and classification of the stages of menopause

- Optimal clinical management of menopause-related symptoms, including:
  - treatments for symptomatic relief (specifically vasomotor, musculoskeletal and psychological symptoms, and altered sexual function), including: -NEXT SLIDE!

Hormone Replacement Therapy for Menopausal symptoms

Hormonal pharmaceutical treatments:

- oestrogen combined with progestogen
    - (oral and transdermal)
- oestrogen
    - (oral and transdermal)
- oestrogen (depot)
- progestogen alone
- testosterone
- tibolone
- bio-identical hormones licensed for use in the UK
- tissue-selective oestrogen complexes
- selective oestrogen-receptor modulators

Hormone Replacement Therapy for Menopausal symptoms

- Non-hormonal pharmaceutical treatments:
  - selective serotonin reuptake inhibitors
  - serotonin–noradrenaline reuptake inhibitors
  - gabapentin
  - clonidine

- Non-pharmaceutical treatments:
  - phytoestrogens
  - herbal preparations (including black cohosh and red clover)
  - acupuncture
  - lifestyle advice

- Psychological therapy:
  - cognitive behavioural therapy

Hormone Replacement Therapy for Menopausal symptoms

- Risks and benefits of treatments;
  - Including the contribution of hormone replacement therapy (HRT) in preventing long-term sequelae of the menopause (especially osteoporosis and cardiovascular disease)
- Timing of treatment
- Monitoring of treatment
- Duration of treatment
- Treatment withdrawal strategies
- Diagnosis and management of premature ovarian insufficiency

Individualised Care

- Adopt an individualised approach at all stages of diagnosis, investigation and management of menopause

- No ‘one size fits all’

Providing information and advice

- Give information to menopausal women and their family members or carers (as appropriate) that includes:
  - an explanation of the stages of menopause
  - common symptoms and diagnosis
  - lifestyle changes and interventions that could help general health and wellbeing

Providing information and advice

- Benefits and risks of treatments for menopausal symptoms
  - Hormonal eg HRT
  - Non-hormonal eg clonidine
  - Non-pharmaceutical eg CBT
- Long-term health implications of menopause.
- Contraception for women who are in the perimenopausal and postmenopausal phase
- NB Young women – normal rules don’t apply
  - Fertility unpredictable

Managing short-term menopausal symptoms - Vasomotor Symptoms

- **Offer women HRT** for vasomotor symptoms after discussing with them the short-term (up to 5 years) and longer-term benefits and risks

- **Do not routinely offer SSRIs, SNRIs or clonidine** as first-line treatment for vasomotor symptoms alone.

Managing short-term menopausal symptoms - Vasomotor Symptoms

- Explain to women that there is some evidence that isoflavones or black cohosh may relieve vasomotor symptoms. However, explain that:
  - multiple preparations are available and their safety is uncertain
  - different preparations may vary
  - interactions with other medicines have been reported

Managing short-term menopausal symptoms - Vasomotor Symptoms

- Consider **HRT** to alleviate **low mood** that arises as a result of the menopause.
- Consider **CBT** to alleviate **low mood or anxiety** that arise as a result of the menopause.
- **there is no clear evidence for SSRIs or SNRIs to ease low mood in menopausal women who have not been diagnosed with depression**

Stopping HRT

- Offer women who are stopping HRT a choice of gradually reducing or immediately stopping treatment.

- Explain that:
  - gradually reducing HRT may limit recurrence of symptoms in the short term
  - gradually reducing or immediately stopping HRT makes no difference to their symptoms in the longer term.

- NO ARBITRARY TIME LIMIT!

Venous thromboembolism

- HRT affects vascular endothelium
- Oral HRT affects hepatic production and clearance of haemostatic factors

Oral HRT and VTE

Randomized clinical trials

- Oestrogen & Progesterone (age 70–79 years) RR 7.5
  vs. placebo (age 50–59 years)
- Oestrogen & Progesterone(age 50–59 years) RR 0.7
  vs. placebo (age 70–79 years)

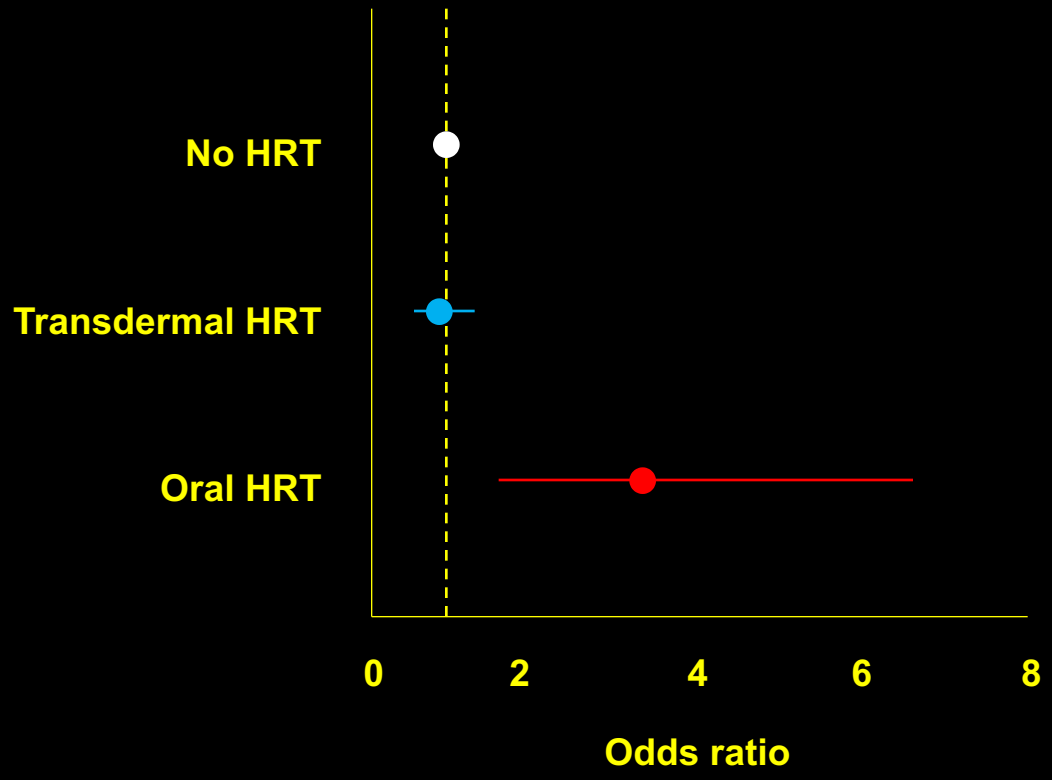
Hulley *et al. J Am Med Assoc* 1998;280:605–13
Cushman *et al. J Am Med Assoc* 2004;292:1573–80
Women's Health Initiative Steering Committee. *J Am Med Assoc* 2004;291:1701–12

Oestrogen Replacement and HRT and VTE risk: absolute risk

- A per oral HRT increases moderately the thromboembolic risk, in particular in presence of hereditary or acquired thrombophilia, and during the first year after initiation of Oestrogen replacement or HRT

  (Age 50–59: 2 additional cases/year per 10,000 women)
- Low-dose transdermal HRT seems not to increase the thromboembolic risk

HRT route and VTE



Scarabin, *et al. Lancet* 2003;362:428–32

Risk of VTE: HRT route of administration and progestogens

(ESTHER study)

Route/progestagen	OR	95% CI
Oral	4.2	1.5–11.6
Transdermal	0.9	0.4–2.1
Micronized progesterone	0.7	0.3–1.9
Pregnanes	0.9	0.4–2.3
Norpregnanes	3.9	1.5–10.0

HRT and thromboembolism:

Misperceptions

- The risk of both venous and arterial thromboembolism is increased during HRT
- Stroke risk is substantially increased in women receiving HRT

Venous thromboembolism

- Explain to women that:
  - The risk of venous thrombosis is approximately two-fold higher with standard doses of oral HRT, but is a rare event in that the background prevalence is extremely low in a healthy woman under 60 years of age. It is also associated with obesity and with thrombophilia
  - the risk of venous thromboembolism (VTE) is increased by oral HRT compared with baseline population risk
  - the risk of VTE associated with HRT is greater for oral than transdermal preparations
  - the risk associated with transdermal HRT given at standard therapeutic doses is no greater than baseline population risk.

Cardiovascular disease

- HRT:
  - does not increase cardiovascular disease risk when **started in women aged under 60 years**
  - does not affect the risk of dying from cardiovascular disease**.**
    - the presence of cardiovascular risk factors is not a contraindication to HRT as long as they are optimally managed.

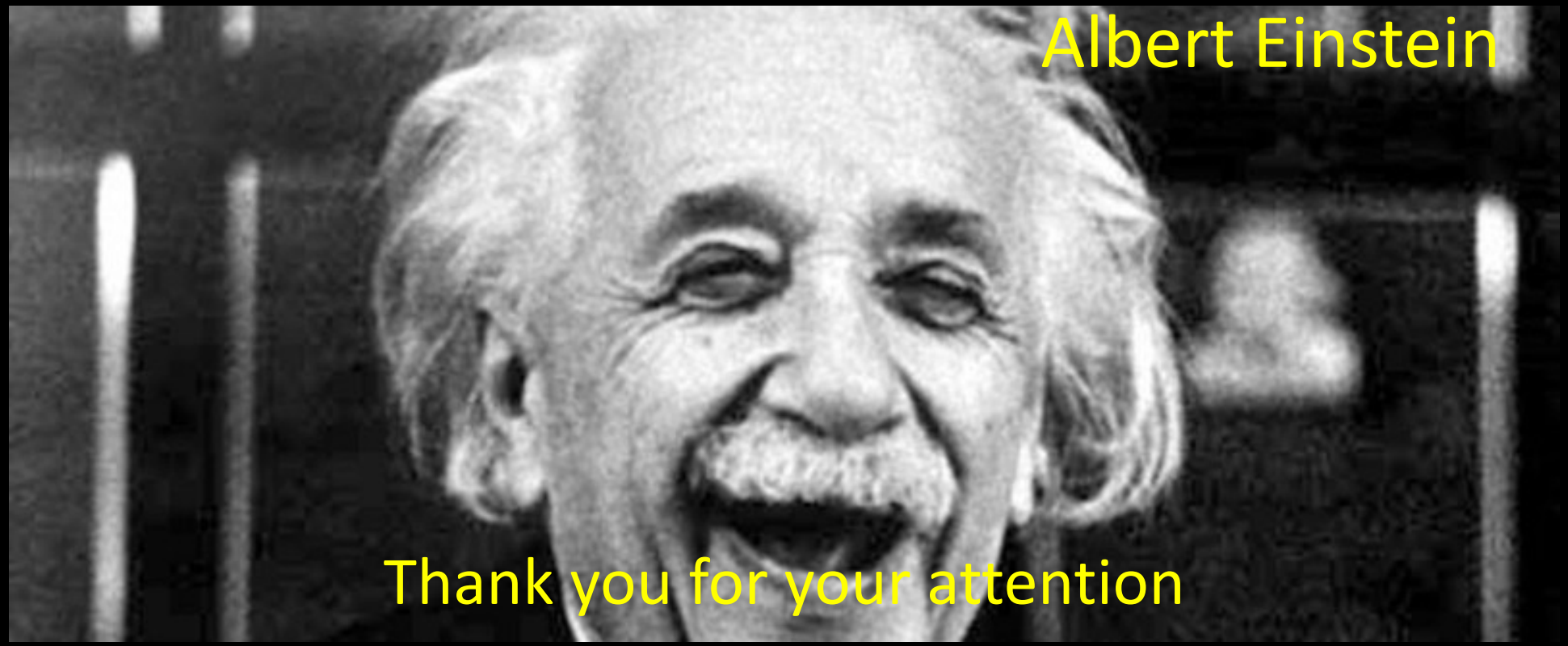
Cardiovascular disease

- The baseline risk of coronary heart disease and stroke for women around menopausal age varies from one woman to another according to the presence of cardiovascular risk factors
  - HRT with oestrogen alone is associated with no, or reduced, risk of coronary heart disease
  - HRT with oestrogen and progestogen is associated with little or no increase in the risk of coronary heart disease.
- Oral (**but not transdermal**) oestrogen is associated with a small increase in the risk of stroke
  - the baseline population risk of stroke in women aged under 60 years is very low .

Summary

- Hormonal manipulation increase thrombotic risk
- Minimise risk by
  - Keeping a good body shape/weight
  - NEVER smoke
  - Consider the mode of absorption
- Pregnancy is much higher risk than the contraception
- Menopausal symptoms can devastate a life, both for the lady suffering and those in her care network

Education is what remains
after one has forgotten what one has learned
in school



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Questions?

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