



SESSÃO DE TEMAS LIVRES EM ANGIOLOGIA

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PROFILAXIA DA TROMBOSE VENOSA E DA EMBOLIA PULMONAR



- **INTRODUÇÃO:**

-Para que profilaxia?



•INTRODUÇÃO:

Table II - The frequency of proximal DVT in the absence of prophylaxis diagnosed by surveillance with objective methods (fibrinogen uptake test or phlebography).

Patient group	Number of studies	Number of patients	Incidence of DVT	95% CI
General surgery (Clagett & Retsch, 1988) ⁷⁴	16	1206	83 (6.9%)	5.5 to 8.3% ⁴
Elective hip replacement (Impertale & Speroff, 1994) ¹⁰²	25	1436	330* (23%)	20.8 to 25.2%
Total knee replacement Hull et al., 1979 ⁴² Kim, 1990 ⁴³ Leclerc et al., 1996 ⁴⁴ Mckenna et al., 1976 ¹⁰³ Stringer et al., 1989 ⁴⁶ Stulberg et al., 1984 ⁴⁷ Wilson et al., 1991 ⁴⁸	7	536	41 (7.6%)	5.5 to 10.1%



•INTRODUÇÃO:

Table III - The frequency of clinical pulmonary embolism* in the absence of prophylaxis.

Patient group	Number of studies	Number of patients	Clinical PE	95% CI
General surgery (Clagett & Reisch, 1988) ⁷⁴	32	5091	82 (1.6%)	1.3 to 2.0%
Elective hip replacement (Imperiale & Speroff, 1994) ¹⁰²	25	1436	57** (4%)	3.0 to 5.1%
Traumatic orthopaedic surgery (APTC,1994) ¹⁰⁴	11	494	34 (6.9%)	4.8 to 9.5%

•INTRODUÇÃO:

Table VIII - Effect of low dose subcutaneous heparin (LDH) in the prevention of DVT diagnosed by surveillance with objective methods in non-orthopaedic randomised controlled studies (fibrinogen uptake tests and/or phlebography).

Authors	Control groups		Heparin groups	
	Number of patients	DVT (%)	Number of patients	DVT(%)
Abernathy & Hartsuck, 1974 ²⁰⁴	62	3 (4.8)	63	4 (6.3)
Belch et al., 1979 ²⁰⁵	25	8 (32)	24	0
Bergqvist & Hallbook, 1980 ²⁰⁶	58	14 (24.1)	53	6 (11.3)
Caloghera et al., 1984 ²⁰⁷	40	3 (7.5)	40	2 (5)
Clarke-Pearson et al., 1983 ⁸⁹	105	12 (11.4)	95	9 (9.5)
Coe et al., 1978 ⁶⁶	24	7 (29.2)	28	8 (28.6)
Covey et al., 1975 ²⁰⁸	52	5 (9.6)	53	4 (7.5)
Gallus et al., 1973 ⁵⁴	109	16 (14.7)	100	1(1)
Gallus et al., 1976 ²⁰⁹	412	49 (11.9)	408	9 (2.2)
Gordon-Smith et al., 1972 ²¹⁰	51	21 (41.2)	105	17 (16.2)
Groote-Schuur Study, 1979 ²¹¹	323	54 (16.7)	323	30 (9.3)
Gruber et al., 1977 ²¹²	113	36 (31.9)	119	12 (10.1)
Hedlund et al., 1979 ⁶⁷ & 1981 ²¹³	29	11 (37.9)	30	2 (6.7)
IMT, 1975 ²¹⁴	724	187 (25.8)	673	55 (8.2)
Kakkar et al., 1972 ⁵⁵	39	17 (43.6)	39	3 (7.7)
Kettunen et al., 1974 ²¹⁵	117	48 (41)	83	7 (8.4)
Kopenhagen and Matthes, 1982 ²¹⁶	50	15 (30)	162	32 (19.8)
Krayzman et al., 1976 ²¹⁷ & 1977 ²¹⁸	27	17 (63)	23	6 (26.1)
Kutnowski et al., 1977 ⁶⁸	4 (30.8)	6	(16.7)	
Lahnborg et al., 1974 ²¹⁹ & 1975 ²²⁰	54	11 (20.4)	58	3 (5.2)
Lawrence et al., 1977 ²²¹	129	20(15.5)	133	8 (6)
Multicentre Trial, 1984 ²²²	108	22 (20.4)	222	32 (14.4)
Multicentre Trial 1974 ²²³	128	47 (36.7)	128	15 (11.7)
Nicolaidis et al., 1972 ²²⁴	122	29 (23.8)	128	1 (0.8)
Plante et al., 1979 ²²⁵	66	14 (21.2)	42	3 (7.1)
Roberts & Cotton, 1975 ²²⁶	45	8 (17.8)	39	10 (25.6)
Sebeseri et al., 1975 ²²⁷	31	18 (58.1)	34	4 (11.8)
Spebar et al., 1981 ²²⁸	19	2 (10.5)	24	3 (12.5)
Strand et al., 1975 ²²⁹	55	10 (18.2)	55	3 (5.5)
Taberner et al., 1978 ⁶⁶	50	11 (22)	50	3 (6)
Torngren et al., 1978 ²³⁰ & 1979 ²³¹	62	18 (29)	66	6 (9.1)
Vandendriets et al., 1980 ⁷¹	33	13 (39.4)	32	3 (9.4)
Wu et al., 1977 ²³²	44	6 (13.6)	44	0
Ziemski et al., 1979 ²³³	20	8 (40)	30	0
Overall	3339	864 (25.9%)	3512	302 (8.6%)



- **CLASSIFICAÇÃO DOS DOENTES:**
 - Risco alto
 - Risco moderado
 - Risco baixo

• FATORES DE RISCO

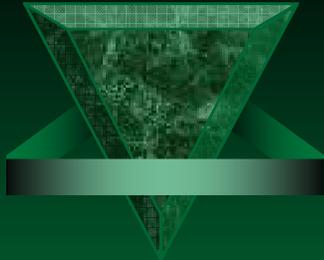
Table VII - Risk categories according to clinical risk factors in non-orthopaedic patients.

Risk category	General surgery	Gynaecology	Obstetrics*	Medical patients
High	Major general surgery, age >60 Major general surgery, age 40-60 & cancer or history of DVT/PE Thrombophilia	Major gynaecological surgery, age >60 Major gynaecological surgery, age 40-60 & cancer or history of DVT/PE Thrombophilia	History of DVT/PE Thrombophilia	Stroke Age >70 Congestive cardiac failure Shock History of DVT/PE Thrombophilia
Moderate	Major general surgery, age 40-60 without other risk factors** Minor surgery, age > 60 Minor surgery, age 40-60 with history of DVT/PE or on oestrogen therapy	Major gynaecological surgery, age 40-60 Major gynaecological surgery, age < 40 on oestrogen therapy Minor surgery, age > 60	Age > 40 years	Immobilised patient with active disease Cardiac failure
Low	Major general surgery, age < 40 No other risk factors** Minor surgery, age 40-60 No other risk factors**	Minor gynaecological surgery, age < 40 without any other risk factors** Minor gynaecological surgery, age 40-60 without any other risk factors**	Age <40 without any risk factors	Minor medical illness

* The risk of DVT in obstetric patients with pre-eclampsia and the other factors is unknown but prophylaxis should be considered.

** The risk is increased by infectious disease, presence of varicose veins, general immobility.

Minor surgery: operations other than abdominal lasting less than 45 minutes. Major surgery: any intra-abdominal operation and all other operations lasting more than 45 minutes.



- **FATORES DE RISCO**

Table VI - The definition of risk categories (modified from Salzman and Hirsh, 1982).¹¹²

Category	Frequency of calf vein thrombosis	Frequency of proximal vein thrombosis	Frequency of Fatal PE
High risk	40-80%	10-30%	>1%
Moderate risk	10-40%	1-10%	0.1-1%
Low risk	<10%	<1%	<0.1%



- **MÉTODOS DE PROFILAXIA:**

- Métodos físicos:

- Movimentação ativa

- Movimentação passiva

- Deambulação precoce

- Meias elásticas de compressão graduada

- Compressão pneumática intermitente



- **MÉTODOS DE PROFILAXIA:**

- Métodos farmacológicos:

- Heparina em minidoses

- Heparina fracionada

- Anticoagulantes orais

- Dextran

- Inibidores da agregação plaquetária

- Novos anticoagulantes



•INDICAÇÕES PARA PROFILAXIA

-Baixo risco

Movimentação no leito

Deambular precoce

-Risco moderado

Heparina 5000UI 12/12 h

HBPM dose menor

Maior risco de hemorragia: meias anti-tombóticas

-Alto risco

Heparina 5000UI 08/08 h

HBPM dose maior

Grande risco hemorrágico: compressão pneumática intermitente



- **BIBLIOGRAFIA**

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