

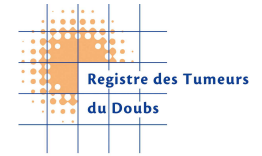
Natural history of Uterine Sarcoma in the Doubs Department, France, 1980-2003

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Context



□ Uterine Sarcoma (US)

- Relative part of US in malignant uterine tumours $\leq 10\%$
- Poor prognosis : 5 year crude survival $\sim 30\%$

□ Problematic

➤ Diagnosis

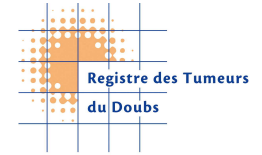
- Heterogeneous group : main subtype **leiomyosarcoma**, **carcinosarcoma** and **endometrial stromal sarcoma**
- Non specific clinical symptoms

➤ Treatment

- Principal treatment : surgical resection
- Adjuvant chemotherapy or hormonal treatment controversial



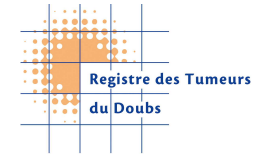
Objectives



- ❑ **To estimate the incidence of US and their relative part in malignant uterine tumours**
- ❑ **To describe the anathomopathological and clinical features of these tumours**
- ❑ **To describe US diagnosis and therapy**
- ❑ **To estimate patient's survival and to identify prognostic factors**



Patients and methods



- ❑ **Cases diagnosed from January 1st 1980 to December 31st 2003 living in the Doubs Department at time of diagnosis**
- ❑ **Topography : C54 with Morphology (CIMO3) :**
[8680/3 ; 8711/3] or [8800/3 ; 9044/3] or [9060/3 ; 9581/3]
- ❑ **Collected information from the registry database and medical records :**
- ❑ **Statistical analysis**
 - **Incidence standardised with world reference population**
 - **Survival rate estimated by Relative Survival**
 - Esteve's model with the approach described by Dickman used to identified independent prognostic factors of survival
 - Observations censored on February 1st 2009



Results

□ Anathomopathological characteristics

- 71 patients
- **Main histological subtype :**
 - Carcinosarcoma (CS) : 29 (41%)
 - Leyomyosarcoma (LMS) : 22 (31%)
 - Endometrial stromal sarcoma (ESS) : 20 (14%)
- Relative part of US in malignant uterine tumours :
7.8% (*stable through time*)

□ Incidence rate

- **Annual standardised incidence rate: 0.85/100 000 person-year [0.64- 1.05] (*stable through time*)**



Results

□ Clinical characteristics

	CS	LMS	Other	All
	n=29	n=22	n=20	n=71
Median age (year)	72	54	56	60 29 to 90 yrs
Median delay diag (week)	12	32	16	16
Symptomas				
Abnormal vaginal bleeding	28 (97)	4 (18)	19 (95)	51 (72%)
Pelvic pain	1 (3)	18 (82)	0 (0)	19 (27)
Asymptomatic	0 (0)	0 (0)	1 (1)	1 (1)
Post-surgery US diagnostic	18 (62%)	20 (91%)	14 (70%)	52 (73%)
Surgery indications if post-surgery diagnosis				
Benign pathology	1 (6)	16 (80)	11 (79)	28 (54)
Malignant pathology	17 (94)	4 (20)	3 (21)	24 (46)

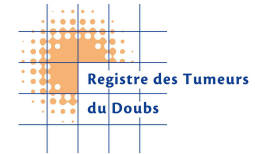


Results

	CS n=29	LMS n=22	Other n=20	All n=71
Treatment				
Surgery	29 (100)	22 (100)	20 (100)	71 (100%)
Adjuvant treatment				
Radiotherapy	12 (41)	4 (18)	6 (30)	22 (32)
Chemotherapy	0 (0)	0 (0)	1 (1)	1 (1)
Radiotherapy + Chemotherapy	5 (18)	7 (32)	5 (25)	17 (25)
None	12 (41)	9 (41)	8 (40)	29 (41)
Figo Stade				
I	13 (45)	9 (41)	12 (60)	34 (48)
II	6 (21)	7 (32)	2 (10)	15 (21)
III	6 (21)	6 (28)	2 (10)	14 (20)
IV	4 (13)	0 (0)	4 (20)	8 (11)



Results



□ Survival analysis

- **Survival status**
 - **24 patients still alive on February 2009**
 - **8 patients lost to follow-up (unknown birth-place)**
 - **39 patients were dead**
- **Median survival time : 54 months**
- **1 year crude survival rate : 75%**
- **3 year crude survival rate : 58%**
- **5 year crude survival rate : 45%**



Results

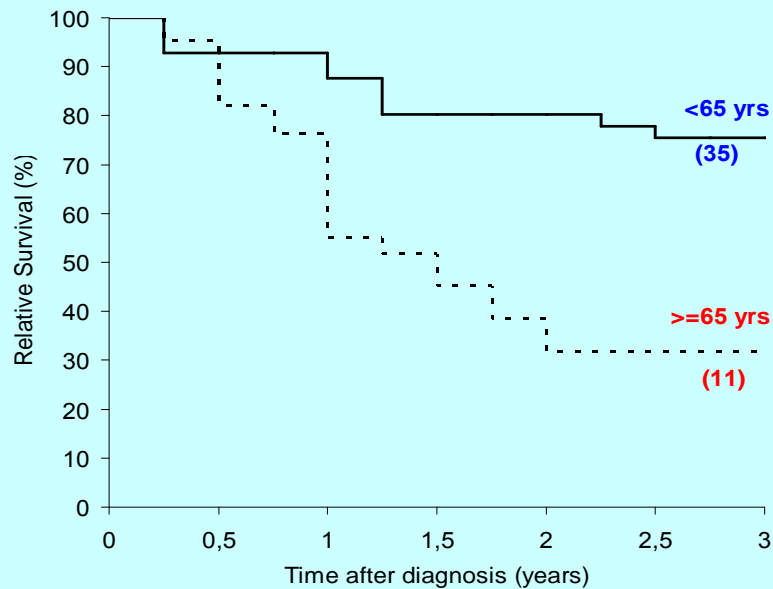
□ Prognostic factors (relative survival)

		Multivariate analysis			
		n	HR	CI95%	p
Figo	Figo I-II	49	1.0		
	Figo III-IV	22	3.6	[1.6-7.9]	0.0020
Tumor type	Other type	42	1.0		
	CS	29	1.7	[0.9-3.4]	0.1320
Age group	<65 yrs	41	1.0		
	>=65 yrs	30	2.1	[1.0-4.6]	0.0530
Tumor size	<5 mm	31	1.0		
	>=5mm	33	2.1	[0.9-4.9]	0.0830
	Unknown	9	1.8	[0.5-5.9]	0.3490
Neoadjuvant treatment	Yes	30	1.0		
	No	41	0.7	[0.4-1.4]	0.3550

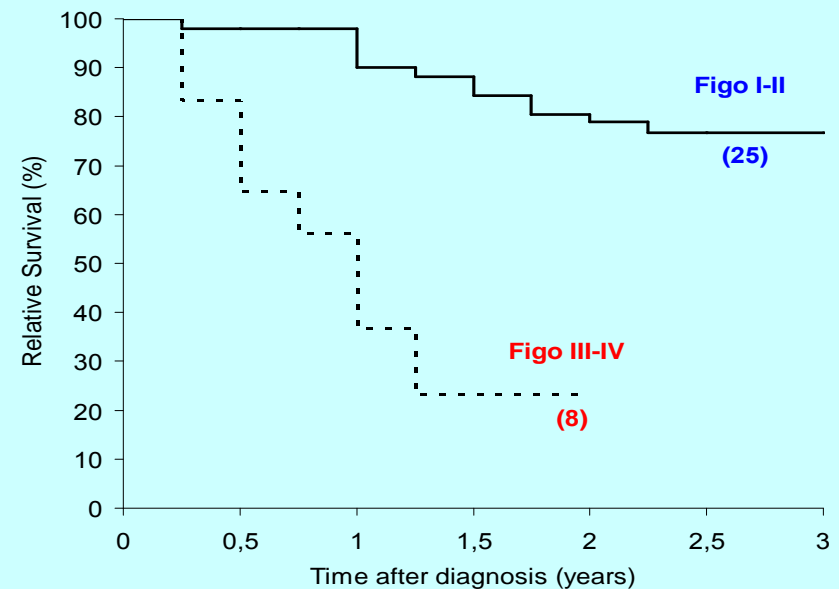


Results

Relative Survival according to age group



Relative Survival according to Figo stage



In brackets : number of patients at risk at the end of follow-up time



Discussion

□ Diagnosis aspects

- Incidence rate : < 2/100 000 person-year
- Subtypes : CS (40%), LMS (40%) and SSE (15%)
- Symptoms : non specific
- Diagnosis:
 - 73% post surgery with 54 % benign pathology
 - Gonzales-Bosquet study¹ (n= 94): 57%*

□ Survival and Prognostic factors

- Studies size : small (< 150pts) except norway studies
- 5 Year overall survival all types: **30% to 45%**
 - CS: 18% to 38%
 - LMS: 22% to 40%
- Prognostic factors : **stage and age**
(*menopausal status, mitotic index, differentiation*)

(1) *Gonzales-Bosquet E. Eur J Gynaec Oncol 1997; 3: 192-5.*



Discussion

□ Adjuvant radiotherapy

➤ Retrospective studies

- Surgery only vs Surgery + RTX
- Heterogeneity (n = 24 to 103)
- Improvement Local control

➤ Random controlled study (EORTC¹)

- Surgery + Observation vs Surgery + RTX
- 224 SU (92 CS, 99 LMS, 30 SSE)
- Stage I and II
- Local control : improvement (CS only)
- Survival : no difference

(1) Reed NS, Mangioni C, Malmström H, et al. *Eur J Cancer* 2008; 44: 808-18.



Discussion

□ Adjuvant chemotherapy

➤ Random controlled study¹ (GOG)

- Surgery + Doxorubicine vs Surgery
- 225 SU – Stage I and II
- No significant difference

➤ Random controlled study² (GOG)

- Surgery + cisplatin + ifosfamide
vs Surgery + RTX (abdominal)
- 206 carcinosarcoma
- No significant difference

(1) Omura GA, Blessing JA, Major F et al. *J Clin Oncol* 1985; 3: 1240-5.

(2) Wolson AT, Brady MF, Rocreto T, et al. *Gynecol oncol* 2007; 107: 177-85



Conclusion

□ Diagnosis

- **Post surgery (73%)**
- **CS : patient > 60 years**
- **LMS and SSE: per menopausal patient**
- **Symptoms: abnormal vaginal bleeding**

□ Treatment

- **Surgery: reference treatment**
- **Adjuvant RTX : local control in CS**
- **Adjuvant Chemotherapy : ?**