

VULVAR AND VAGINAL DISEASES IN FRANCE: EVALUATION FROM HOSPITAL STAYS

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BACKGROUND

- Almost 27,000 women worldwide, among whom about 16,000 in industrialised countries, are diagnosed with vulvar cancer each year¹.
- Similarly, 13,200 women, including 4,200 in industrialised countries, are diagnosed with vaginal cancer annually¹.
- About 40% of vulvar and 70% of vaginal cancers may be linked to Human Papillomavirus (HPV)².
- In France, the epidemiology of vulvar and vaginal cancers and dysplasia remains poorly documented.

OBJECTIVE

The objective of this study was to assess the medical burden associated with hospitalisations for vulvar, vaginal cancers and dysplasia (VIN, VaIN) in France using the French national hospital database.

METHODS

Data sources

- French National Hospital Database (PMSI), which records all admissions to public and private hospitals in France:
- SAE database (Statistiques Annuelles des Etablissements de santé): Radiotherapy sessions performed in private hospitals were extracted there.

Data extraction

- All hospital stays (inpatient and day-hospital admissions) with ICD10 codes corresponding to vulvar & vaginal diseases were extracted for the year 2006 and classified into four categories of care (surgery, exploration...).
- Chemotherapy/radiotherapy sessions performed for vulvar and vaginal cancers were extracted .
- Hospitalised patients: considering that one patient can be admitted more than once in hospital during a year, all extracted stays were linked in order to estimate an annual number of hospitalised patients.

RESULTS

Annual number of hospital stays and sessions in 2006

- **1,478 and 903 hospital stays** were extracted for vulvar and vaginal cancers respectively in 2006 (table 1).

Table 1. Annual number and type of stays

Diseases	Total number of stays	% of Surgery stays	% of Medical stays	% of Exploration stays	% of Palliative stays
Vulvar cancer	1,478	63%	23.7%	4.7%	8.6%
VIN1	65	75.4%	24.6%	0%	0%
VIN2/3 - CIS	570	86.0%	13.3%	0.2%	0.5%
Vaginal cancer	903	30.9%	52.2%	10.3%	6.6%
VaIN1	63	88.9%	9.5%	1.6%	0%
VaIN2/3 - CIS	168	86.3%	12.5%	1.2%	0%

- **4,430 and 4,403 sessions** were extracted for vulvar and vaginal cancers respectively in 2006 (table 2).

Table 2. Annual number of chemotherapy & radiotherapy sessions

Diseases	Chemotherapy sessions	Radiotherapy sessions	TOTAL
Vulvar cancer	644	3,786	4,430
Vaginal cancer	752	3,651	4,403

Annual number of patients hospitalised in 2006

- **1,237 and 728 patients** with vulvar and vaginal cancers were identified in 2006 respectively (table 3).

Table 3. Annual number of hospitalised patients with vulvar or vaginal diseases

Diseases	Annual number of hospitalised patients
Vulvar cancer	1,237
VIN1	59
VIN2/3 - CIS	500
Vaginal cancer	728
VaIN1	61
VaIN2/3 - CIS	153

Age distribution of hospitalised patients

Figure 1a. Age distribution of patients with vulvar cancer and VIN

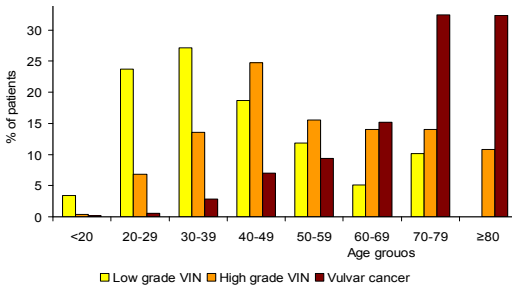
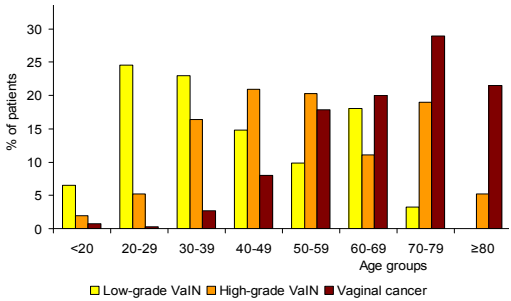


Figure 1b. Age distribution of patients with vaginal cancer and VaIN



Prevalence of hospitalised vulvar & vaginal cancer

Based on the annual number of hospitalisations and the French female population of 15 years old and older, prevalence of vulvar and vaginal cancer has been estimated at **4.6/ 100,000** and **2.7/ 100,000** respectively.

Annual number of patients hospitalised due to HPV-related vulvar and vaginal diseases

Based on the proportion of HPV-related cases reported in the literature² (vulvar cancer: 36%, VIN: 76%, vaginal cancer: 72%, VaIN: 93%), the annual number of patients hospitalised due to **HPV-related vulvar cancer** and **VIN** was estimated at **445** and **473**, and at **524** and **277** for **vaginal cancer** and **VaIN** respectively.

CONCLUSION

- The burden of hospitalisations due to vulvar and vaginal cancers and dysplasia in France is substantial.
- Annual number of vulvar and vaginal dysplasia is very underestimated since most of them may be managed in an outpatient setting or not treated at all. Further research is needed to assess the outpatient burden of these lesions.
- Prevention of vulvar and vaginal lesions by prophylactic HPV vaccination would significantly reduce the number of cases and the medical burden in terms of number of hospitalisations and procedures