

UTERINE LEIOMYOMAS (FIBROIDS)

Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) for the purpose of epidemiological surveillance of a condition important to military-associated populations. In the U.S. Armed Forces in 2010, “uterine leiomyoma” (ICD9 code: 218) was the 5th most frequent diagnosis during hospitalizations for active component females, and the 2nd most frequent diagnosis during ambulatory visits for neoplasms.^{1, 2}

Clinical Description

Uterine leiomyomas, or “fibroids”, are benign, often asymptomatic tumors of the uterus that occur frequently in premenopausal women. Symptomatic fibroids can cause appreciable morbidity and disability in affected women; common symptoms include heavy, painful menstrual bleeding, pelvic pain, urinary frequency, and reproductive difficulties. Treatments for symptomatic fibroids vary according to the size, location, and number of fibroids, the severity of symptoms, and the patient’s desire to retain reproductive ability. Therapeutic options range from watchful waiting and drug therapy to surgical procedures such as hysterectomy (removal of the uterus) and myomectomy (removal of the fibroid).³

Case Definition and Incidence Rules

For surveillance purposes, a case of uterine leiomyomas or “fibroids” is defined as:

- *One hospitalization or outpatient medical encounter* with any of the defining diagnoses of uterine leiomyomas (see ICD9 and ICD10 code lists below) in the *primary* diagnostic position; or
- *One hospitalization or outpatient medical encounter* with any of the defining diagnoses of uterine leiomyomas (see ICD9 and ICD10 code lists below) in the *secondary* diagnostic position; AND at least one associated symptom (see ICD9 and ICD10 code lists below) in the *primary* diagnostic position.

Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first hospitalization or outpatient medical encounter that includes a defining diagnosis of uterine leiomyomas.
- An individual is considered an incident case only *once per lifetime*.

(continued on next page)

¹ Armed Forces Health Surveillance Center. Hospitalizations among members of the active component, U.S. Armed Forces, 2010. *Medical Surveillance Monthly Report (MSMR)*. 2011; 18(4): 8-15.

² Armed Forces Health Surveillance Center. Ambulatory visits among members of the active component, U.S. Armed Forces, 2010. *Medical Surveillance Monthly Report (MSMR)*. 2011; 18(4): 16-21.

³ Armed Forces Health Surveillance Center. Uterine fibroids, active component females, U.S. Armed Forces, 2001-2010. *Medical Surveillance Monthly Report (MSMR)*. 2011; 18(12): 10-13.



Case Definition and Incidence Rules *(continued)*

Exclusions:

- Individuals with a case defining encounter of uterine fibroids prior to the surveillance period.

Codes

The following ICD9 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Uterine leiomyomas (Fibroids)	D25 (leiomyoma of uterus)	218 (uterine leiomyoma)
	D25.0 (submucous leiomyoma of uterus)	218.0 (submucous leiomyoma of uterus)
	D25.1 (intramural leiomyoma of uterus)	218.1 (intramural leiomyoma of uterus)
	D25.2 (subserosal leiomyoma of uterus)	218.2 (subserous leiomyoma of uterus)
	D25.9 (leiomyoma of uterus, unspecified)	218.9 (leiomyoma of uterus, unspecified)

Associated Symptoms

Associated Symptoms	ICD-10-CM Codes	ICD-9-CM Codes
Anemia due to blood loss	D50.0 (iron deficiency anemia secondary to blood loss; chronic)	280.0 (iron deficiency anemia secondary to chronic blood loss)
	D62 (acute posthemorrhagic anemia)	285.1 (acute post hemorrhagic anemia)
Vaginal bleeding, menstrual bleeding disorders	N89.8 (other specified noninflammatory disorders of vagina)	623.8 (other specified non-inflammatory disorders of vagina)
	N92.0 (excessive and frequent menstruation with regular cycle)	626.2 (excessive or frequent menstruation)
	N92.1 (excessive and frequent menstruation with irregular cycle)	626.6 (metrorrhagia)
	N92.3 (ovulation bleeding)	626.5 (ovulation bleeding)
	N92.4 (excessive bleeding in the premenopausal period)	627.0 (premenopausal menorrhagia)
	N92.5 (other specified irregular menstruation)	626.8 (other; dysfunctional or functional uterine hemorrhage not otherwise specified)
N92.6 (irregular menstruation, unspecified)	626.9 (disorders of menstruation and other abnormal bleeding from female genital tract, unspecified)	

(continued on next page)



	N93.8 (other specified abnormal uterine and vaginal bleeding)	626.8 (above)
	N93.9 (abnormal uterine and vaginal bleeding, unspecified)	626.9 (above)
Pain associated with female genital organs	N94.1 (dyspareunia)	625.0 (dyspareunia)
	N94.4 (primary dysmenorrhea)	625.3 (dysmenorrhea)
	N94.5 (secondary dysmenorrhea)	625.3 (above)
	N94.6 (dysmenorrhea, unspecified)	625.3 (above)
	N94.8 (other specified conditions associated with female genital organs and menstrual cycle)	--
	- N94.89 (other specified conditions associated with female genital organs and menstrual cycle)	625.5 (pelvic congestion syndrome)
	N94.9 (unspecified condition associated with female genital organs and menstrual cycle)	Translated code to broad for inclusion
	N94.89 (above) R10.2 (pelvic and perineal pain)	625.9 (unspecified symptom associated with female genital organs)

Development and Revisions

- In January of 2015 the case definition was updated to include ICD10 codes.
- This case definition was developed in December of 2011 by the Medical Surveillance Monthly Report (MSMR) staff for use in a MSMR article on uterine fibroids.³ The definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

Case Definition and Incidence Rule Rationale

- Incident cases are limited to the primary and secondary diagnostic positions in an effort to limit the effect of incidental detections of asymptomatic leiomyomas and to increase case-finding for symptomatic leiomyomas.

Because encounters for symptomatic cases of leiomyomas may be documented with the symptoms recorded in the first diagnostic position and the cause (leiomyoma) in the secondary position, the case definition allows for this hierarchy in order to increase its sensitivity while preserving specificity.

Code Set Determination and Rationale

- The code set, to include the code set for the “associated symptoms” was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9th Revision. The code set used for “associated symptoms” was selected by AFHSC based on research done by Flynn, et. al.⁴

⁴ Flynn M, Jamison M, Datta S, and Myers E. Health care resource use for uterine fibroid tumors in the United States. *American Journal of Obstetrics and Gynecology* 2006; (195) 955-64.



Reports

None

Review

Jan 2015	Case definition reviewed and updated by the AFHSC Surveillance Methods and Standards (SMS) working group.
Jan 2012	Case definition reviewed and adopted by the AFHSC Surveillance Methods and Standards (SMS) working group.
Dec 2011	Case definition developed by AFHSC MSMR staff.

Comments

In the MSMR article referenced above procedure codes are listed in the ICD9 code list (Table 1)³. These codes are not case-defining codes or related symptom codes, but rather codes used to measure health care burden. Therefore, they are not included in the code list for this case definition.

