

Protocol 11 MSH6 mutation carrier guidelines

Male MSH6 risks*		
Cancer type	Male approximate risk (up to 70 yrs)	
	General population in UK*	MSH6 mutation carrier
Colorectal	2%	20% to 70%
Endometrial	-	-
Ovarian	-	-
Gastric	<1%	Similar to population
Urinary tract	<1%	Similar to population
Pancreatic	<1%	-
Small bowel	< 1%	Similar to population
Brain	<1%	Similar to population
Hepatobiliary	<1%	Similar to population

Combined lifetime risk of kidney, stomach, ovary, small bowel, ureter, and brain is 3%

Female MSH6 risks*		
Cancer type	Female approximate risk (up to 70 yrs)	
	General population in UK*	MSH6 mutation carrier
Colorectal	<2%	10% to 30%
Endometrial	<2%	25% to 70%
Ovarian	<2%	Similar to population
Gastric	<1%	Similar to population
Urinary tract	<1%	Similar to population
Pancreatic	<1%	-
Small bowel	<1%	Similar to population
Brain	<1%	Similar to population
Hepatobiliary	<1%	Similar to population

Combined lifetime risk of kidney, stomach, ovary, small bowel, ureter, and brain is 11%

Approximate MSH6- Age-dependent cumulative cancer risks*

Current age (yrs)	Male colorectal	Female colorectal	Endometrial
50	<5%	<3%	<10%
60	10%	5%	15%
70	20%	10%	25%
80	45%	20%	45%

Carrier management

Surveillance*

Colorectal

-18 monthly colonoscopies 30 to 75yrs – review age 75

Gynaecological

-Ovarian and endometrial cancer surveillance is not recommended outside a research setting

Other cancers

-No surveillance is recommended for other cancers; carriers may be eligible for surveillance in research studies

Symptom awareness*

All MSH6 mutation carriers should be advised to practice symptom awareness.

The following symptoms should be discussed:

Bowel: PR bleeding, blood in stools, change in bowel habits, abdominal pain, weight loss, fatigue

Gastric: Prolonged indigestion, early satiety, fatigue, melaena, weight loss, nausea

Urinary tract: Haematuria, abdominal mass, loin pain, fatigue

Gynaecological: Abnormal vaginal bleeding e.g. post menopausal, irregular periods, inter-menstrual bleeding, menorrhagia

Risk-reducing surgery*

Gynaecological

Offer risk-reducing hysterectomy, once childbearing is complete. BSO could also be considered in post-menopausal carriers or carriers with significant family history of ovarian cancer

Discuss the following:

-Endometrial cancer risk reduction

-Prevention of morbidity related to treatment

-Ovarian cancer risk is not significantly increased. BSO should only be undertaken after detailed discussions of risks and benefits, and usually only in those with a family history of ovarian cancer.

Chemoprevention*

Discuss benefits and side-effects of aspirin chemoprevention (75mg OD) with mutation carriers above 25yrs

Research study recruitment

The following research studies can be discussed with carriers:

-**CAPP3** (aspirin chemoprevention study)

-**IMPACT** (prostate cancer screening study)

-**EUROPAC** (pancreatic cancer screening study)