

Protocol 9 MLH1 mutation carrier guidelines

Male MLH1 risks*		
Cancer type	Male approximate risk (up to 70 yrs)	
	General population in UK*	MLH1 mutation carrier
Colorectal	2%	35% to 65%
Endometrial	-	-
Ovarian	-	-
Gastric	<1%	<10%
Urinary tract	<1%	<5%
Pancreatic	<1%	<5%
Small bowel	< 1%	5%
Brain	<1%	<2%
Hepatobiliary	<1%	3%

Female MLH1 risks*		
Cancer type	Female approximate risk (up to 70 yrs)	
	General population in UK*	MLH1 mutation carrier
Colorectal	<2%	35% to 55%
Endometrial	<2%	20% to 25%
Ovarian	<2%	10% to 15%
Gastric	<1%	<3%
Urinary tract	<1%	<3%
Pancreatic	<1%	<5%
Small bowel	<1%	< 3%
Brain	<1%	<2%
Hepatobiliary	<1%	3%

Approximate MLH1- Age-dependent cumulative cancer risks*

Current age (yrs)	Male colorectal	Female colorectal	Endometrial	Ovarian
30	<3%	<1%	<1%	<1%
40	10%	<5%	<3%	<3%
50	25%	10%	<10%	<5%
60	30%	25%	10%	<10%
70	35%	35%	20%	15%
80	40%	50%	25%	20%

Carrier management

Surveillance*

Colorectal: 18 monthly colonoscopies 25 to 75yrs – review age 75

Gastric

-Upper GI endoscopy is not recommended outside a research setting
-Helicobacter pylori screening to be discussed with all carriers >25 yrs (GP to arrange)

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 MLH1 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 with BSO, once childbearing is complete.

Discuss the following:

- Ovarian cancer risk reduction
- Endometrial cancer risk reduction
- Prevention of morbidity related to treatment
- Side effect; premature menopause
- HRT should be offered until age 50 in women who have not had ER-positive breast cancer

Chemoprevention*

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

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)