

Potential late adverse effects of radiotherapy

Site	Potential late adverse effect	Protocol
Any site	Secondary malignancy	2
Central nervous system	Neuropsychological dysfunction	5
	Hypothalamic / pituitary dysfunction	9
	Reduced bone mineral density	22
Spinal (check extent of radiotherapy field)	Thyroid dysfunction	10
	Adverse pregnancy outcome	11
	Gonadal dysfunction	11, 12
	Scoliosis, kyphosis	13
	Cardiac dysfunction	14
	Respiratory dysfunction	15
	Breast hypoplasia, malignancy, impaired lactation	16
	Renal dysfunction	20
	Bladder fibrosis, haemorrhagic cystitis	21
	Reduced bone mineral density	22
Ear*	Enhancement of hearing loss	7
Eye*	Cataract	6
	Lacrimal gland dysfunction	6
Mouth, jaw*	Dental caries	8
	Dental hypoplasia	8
	Salivary gland dysfunction	8
Neck (including spinal)	Thyroid dysfunction, nodules, malignancy	10
Thoracic (including spinal)	Cardiovascular disease	14
	Respiratory dysfunction	15
	Breast hypoplasia, malignancy, impaired lactation	16
Abdominal	Adverse pregnancy outcome	11
	Gastrointestinal dysfunction, diarrhoea	17
	Gastrointestinal fibrosis, stricture	17
	Hepatic dysfunction	18
	Hepatic fibrosis, cirrhosis	18
	Splenic dysfunction	19
	Renal hypoplasia	20
	Glomerular dysfunction	20
	Proteinuria	20
	Hypertension	20
Pelvic	Adverse pregnancy outcome	11
	Uterine hypoplasia, fibrosis, reduced elasticity	11
	Bladder fibrosis, haemorrhagic cystitis	21
	Avascular necrosis	22
Gonads*	Adverse pregnancy outcome	11
	Hypogonadism	11, 12, C
	Impaired fertility	11, 12, D
Bone	Avascular necrosis	22
	Fracture	22, 24
	Hypoplasia, deformity	24
Skin, hair	Pigmented skin lesions	23
	Hypoplasia, fibrosis, atrophy, telangiectasia	23, 24
Soft tissue	Hypoplasia, fibrosis, atrophy	24
Any major artery*	Atheroma, stenosis	24
TBI	All of above	1 – 24 B, C, D, E
MIBG	Thyroid dysfunction	10

* any field including this site

NB This Table is not intended to be inclusive of all late adverse effects of radiotherapy conditioning for BMT – see Appendix B

Abbreviations

MIBG - ¹³¹I-metaiodobenzylguanidine

TBI - total body irradiation