EXPERT MEDICAL REPORT FOR THE COURT

ON BREACH OF DUTY

Prepared by:

Dominic Brown
Fir Lea House
Whitecross
Newquay
TR8 4LW

Date: 10th November 2016

Claimant: MRS Z

(**Date of Birth:**)

PREPARED AT THE REQUEST OF:

CONTENTS

1. BRIEF CURRICULUM VITAE

Dr Dominic Harold Brown MbChB MRCGP MRCP
GMC 4197014
Qualified University of Birmingham 1995
14 years experience as a General Practitioner
GP appraiser
GP trainer
SpecialistInfo medicolegal training
GP expert Peninsula medicolegal services

2. SUMMARY OF INSTRUCTIONS AND ISSUES TO CONSIDER

2.1 The Defendant (Dr B) was in breach of duty on 28/06/10 for failing to refer for urological assessment in light of her presentation. Given her age, her presenting symptoms of offensive smelling urine, and the test results of mixed bacterial growth, a routine onward referral was necessitated. In failing to refer, the Defendant was in breach of the 2008 British Association of Urological Surgeons guidelines (BAUS/RA) on the management of haematuria (ref 9.2). The urine report on 28/06/10 indicated an unusual organism and was erroneously reported as normal

2.2 The Defendant was in breach of duty on 21/02/14 and/or 26/02/14 for failing to refer for urgent urological assessment given the persistent finding of haematuria (blood in the urine). The failure to refer was in breach of the 2005 NICE guidelines (ref 9.1).

2.3 The Defendant was in breach of duty on 13/11/14 and or 14/11/14 for failing to refer for urgent urological assessment and instead referring the claimant to a gynaecologist.

Although I am instructed by the X this report is prepared as an independent expert opinion for the Court. My full declaration is set out at the end of this report.

3. DOCUMENTATION, MATERIALS AND INFORMATION PROVIDED

3.1 Letter of Claim from dated 25/08/16.

3.2 Letter from the Defendant in response to the claim dated 03/11/16

3.3 Claimant's primary care record from Surgery 13/01/67-22/04/15.

3.4 Claimant's hospital records from Hospital 29/11/13-08/02/16.

3.5 Joint Consensus Statement on the Initial Assessment of Haematuria 2007/08.

3.6 NICE referral guidelines for suspected cancer 2005.

4. HISTORY AS GIVEN BY THE CLAIMANT

4.1 The history below is taken from the Letter of Claim by the Claimant's solicitor (3.1) as I have not been provided with a statement from the claimant. The Letter of Claim includes sections of the medical records which I have also included in this summary in order to give a sequence of events.

4.2 The letter states that the Claimant had normal routine cervical smear tests in 2007 and 2008. In April 2010 she consulted the Defendant as she had noticed that her urine had become smelly and she suspected that she had a urine infection. She was treated with the antibiotic trimethoprim.

4.3 The Claimant states that she consulted the Defendant on 28/06/10 but it is unclear from the letter what was discussed. The letter states that the following was recorded in the notes "Urine culture.Mixed bacterial growth.Comments. Normal-OK for this patient. White blood count...86 10*9/l...Red blood cell count...13 10*12/l...Comments. Awaiting further results…" It is alleged that the care was substandard and that the Claimant required onward referral to a urologist.

4.4 The letter states that the Claimant was seen in colposcopy clinic at the Hospital on 19/11/13 for a large loop excision of the cervix following an abnormal cervical smear on 5/11/13.

4.5 The Claimant attended her surgery on 14/01/14 complaining of nocturia (passing urine at night). She was prescribed the antibiotic trimethoprim.

4.6 On 20/01/14 she attended again as she was still getting up a lot through the night to pass urine. She was advised to reduce her fluid intake. She provided a sample of urine.

4.7 The Claimant states that she was informed on 10/02/14 that her urine results were again normal and that no action was needed. The letter states that the following was recorded “Urine nitrite negative...Urine leucocyte test =negative Urine glucose test=negative...Urine blood test=++”. The Claimant felt that things were not right because she was still having a lot of discomfort. She states that she was prescribed antibiotics by the nurse and was advised to provide another urine test.

4.8 The letter states that on 19/02/14 the Claimant was informed that the urine test was normal despite both the urine dipstick and the laboratory analysis showing the presence of white blood cells and red blood cells. The Claimant states that she had informed the reception staff that she was still in pain. She left another urine sample.

4.9 On 20/02/14 the Claimant consulted a nurse due to ongoing dysuria (burning pain). The letter confirms that the nurse recorded the presence of these symptoms and recorded “?needs abs [antibiotics]. Will wait results”.

4.10 The Claimant saw the defendant on 21/02/14 and was advised to give another sample.

4.11 The Claimant states that on 26/02/14, she was again told that her sample was clear and no further action was to be taken. The letter states that “no further action” was recorded despite the urine showing “ white blood cells 453/10*6/L red blood cells 98x10*6/L” and “Culture. Heavy mixed bacterial growth, possible contaminants”.

4.12 The Claimant states that she was informed on 07/03/14 that she had a urinary infection. She states that she left another urinary sample but that no results were communicated to her and that she was made to feel that she was being a nuisance.

4.13 The Claimant attended the University Hospital Colposcopy Clinic on 27/05/14 and 16/06/14. She recalls experiencing vaginal pain and dysuria when she attended. She was examined at the second attendance and advised that she did not need a further colposcopy. She was discharged back to the care of the GP.

4.14 She describes experiencing ongoing vaginal pain and dysuria over subsequent months. She states that she did not return to her surgery as she thought that her problem was being dealt with.

4.15 The Claimant states that when she consulted Dr P on 11/9/14 her symptoms had become unbearable and she was passing blood in her urine and seeing blood when she wiped herself. She recalls asking for a referral on this date. The letter states that there is a medical entry from Dr A on that date describing “Since Feb 2014 dysuria, occasional blood seen on wiping, no temp/back pain/lost half stone in weight” and

“Plan. 1)Check urine-send MSU 2)Bloods 3)Abx, if symptoms persist after abx and urine negative for infection ?USS [ultrasound]”.
(The records suggest that the Claimant actually consulted Dr A on that date rather than Dr P).

4.16 The Claimant states that she left a urine sample on 11/09/14 and again prior to the 25/09/14 as the initial one had gone missing. She states that she was informed that the samples were normal. She further states that “When she asked about the blood she was told that it was only a trace and there was nothing to worry about.” The letter includes the following from the notes on 12/09/14 “White blood cells 209x10*6/L Red blood cells 56x10*6/L...Culture heavy mixed bacterial growth”. The letter further refers to 25/09/14 “White blood cells 304x10*6/L. Red blood cells 36x10*6/L...Culture Negative” and the report annotated “Normal, no further action”.

4.17 The Claimant saw Dr P on 06/10/14 and states that she informed her that her pain was unbearable. She was prescribed antibiotics and advised to return in 7 days. When she returned on the 13/10/14 she was advised to continue antibiotics for a further 5 days.

4.18 The Claimant returned and saw Dr P again on 27/11/14. She states that she informed Dr P that she was still in pain and that she was still passing blood in her urine. She states that she requested a urology referral but that this was turned down and she was advised to wait for a further 2 weeks.

4.19 The Claimant states that when she consulted the Defendant on 13/11/14, she specifically requested a urology referral but was advised that she would need to see a gynaecologist. An appointment with the gynaecologist was scheduled for 21/01/15.

4.20 The Claimant states that before the appointment with the gynaecologist on 21/01/15 she requested that her appointment be expedited. She states that she was informed that she would be unable to receive an earlier appointment.

4.21 The Letter details how the Claimant was seen by the gynaecologist on 21/01/15 and then referred on to urology and diagnosed with bladder cancer on 20/03/15.

5. SUMMARY OF RELEVANT MEDICAL RECORDS

5.1 This summary is based on the Claimant's primary care record from surgery 13/1/67-22/04/15

5.2 The records state that the Claimant was seen by Mrs J on 22/04/10 with "urine smelling no clinical symptoms, thinks may have an infection". Her urine dipstick test was positive for protein, blood, nitrites and leucocytes and was consistent with a urinary tract infection (appendix1). She was treated with the antibiotic trimethoprim. (Mrs J's qualification is unclear from the notes however in the Claimant's statement she is refers to her as a nurse).

5.3 A repeat urine dipstick on 4/5/10 showed a trace of protein, blood 1+. The urine was sent to the laboratory for microscopy and culture (appendix1). The microscopy from this sample was received on 7/5/10 and showed the presence of red blood cells, white blood cells and epithelial cells and a mixed bacterial growth. This is likely to have been a contaminated sample. The result was processed in the name of the Defendant as "Patient does not need to be informed".

5.4 A repeat MSU (mid stream urine sample) was sent for analysis on 08/06/10. This showed an infection with Pseudomonas. It was positive for white blood cells and red blood cells. A comment of "slight infection but with unusual organism. Speak to doctor" was made.

5.5 The records state that the Claimant was contacted by telephone on 24/06/10 and a message was left on her answerphone requesting that she repeat the urine test.

5.6 The subsequent MSU was sent for analysis on 28/06/10. It showed white blood cells, red blood cells,epithelial cells and a mixed bacterial growth. This result was suggestive of a contaminated sample (appendix 2). The records show an entry under the defendant's name of "Normal-OK for this patient" and "The "Patient Informed" status was set to "Patient does not need to be informed".

5.7 The notes state that the Claimant's daughter died of cervical cancer in October 2011.

5.8 On 5/11/13 the Clamaint's cervical smear result was abnormal with precancerous cells. She was referred for colposcopy (detailed examination of the cervix). She underwent a large loop excision (removal of abnormal tissue on the cervix under local anaesthetic). As the tissue removed showed precancerous cells she was advised to return in 6 months.

5.9 On 14/01/14 the Claimant was seen by Dr Y The records state that she had dysuria (burning pain on passing urine). She was treated with the antibiotic trimethoprim.

5.10 On 28/1/14 the Claimant was seen by Dr Y again. The records state that she was suffering from nocturia (needing to pass urine at night). She was advised to reduce her fluid intake and to have a urine check.

5.11 On 10/2/14 The Claimant spoke to Mrs S by telephone with “UTI [urinary tract infection] symptoms”. A urine dipstick that day was negative for nitrites and white blood cells but positive for blood. (This result is not suggestive of a urinary tract infection). The Claimant was treated with the antibiotic amoxicillin and she was advised to bring in a follow up sample.The result of the MSU sent on 10/02/14 showed no bacterial growth but did show the presence of white and red blood cells. (This is again inconsistent with a urinary tract infection and the presence of white blood cells and red blood cells are abnormal). It is unclear from the notes who processed the result but a comment of “Normal no action was made”. (In the records Mrs S is referred to as “NP” which commonly stands for Nurse Practitioner).

5.12 On 19/02/14 the Claimant saw Mrs L with “frequency and burning”. A further urine dipstick test showed blood and white blood cells. The notes state that she was advised to return the following day to see S. The records refer to her as NP which suggests that she is a Nurse Practitioner.

5.13 On 20/02/14 S records “patient remains with UTI symptoms”. She advised waiting for the MSU result.

5.14 On 21/02/14 the Claimant returned and saw the Defendant. The notes state “dysuria is post tx [treatment] Comment:recheck MSU as last sample was clear”.

5.15 The MSU sent on 26/02/14 showed the presence of white blood cells, red blood cells, epithelial cells and a heavy mixed bacterial growth. (This result is likely to have been due to a contaminated sample). It is unclear who processed the result. An entry of “No Further Action” was made.

5.16 On 7/3/14 S’s notes state “Telephone encounter. Ref:UTI. Message left for patient to telephone back”.

5.17 On 27/05/14 the Claimant was seen in colposcopy clinic . She was advised that her smear still showed abnormalities and that she would need further colposcopy on 16/06/14. She was seen again on 19/06/14 and discharged back to the care of the GP.

5.18 On 11/09/14 the Claimant saw Dr A. The notes state “since feb 2014 dysuria, occasional blood seen on wiping, no temp/back pain/lost half stone in weight-not eating, pt cant pass urine now to check, will leave sample before she goes home” and “Plan:1 check urine-send MSU 2)bloods, 3)Abx, if symptoms persist after abx and urine neg for infection ?USS”. The antibiotic trimethoprim was prescribed. The MSU showed the

presence of white blood cells, red blood cells and heavy mixed bacterial growth with possible contaminants. A comment of “Report Abnormal. Need to repeat test” was made.

5.19 The blood tests taken on 11/09/14 were unremarkable.

5.20 A repeat MSU was sent on the 19/8/14 but was not processed due to a labelling issue.

5.21 A further MSU on the 25/09/14 showed white blood cells, red blood cells and no bacterial growth. This is abnormal but was reported as “Normal.No further Action”. The clinical entry is in the name of Dr J.

5.22 On 06/10/14 the Claimant was seen by Dr I. The notes state that she had symptoms of burning pain, frequency and urgency and that the MSU was negative. (This was incorrect.5.20). The Claimant was treated with the antibiotics co-amoxiclav and metronidazole and advised to return in 7 days.

5.23 On 13/10/14 Dr I noted that the Claimant was feeling better but still had pain on passing urine. She was diagnosed with “urtritis”(sic) which may have been a misspelling of urethritis (an infection of the urethra). She was advised to continue taking both antibiotics for a further 5 days.

5.24 The Claimant saw Dr I again on 27/10/14. She noted “still noticed drops of blood while whiping after passing urine”(sic) and “all symptoms improved except this mild pink ooze when whipping”(sic). She further noted “ reassured, agreed to wait another two weeks, than if persistent to be referd to urology/gyn after having vaginal exam”

5.25 The Claimant saw the Defendant on 13/11/14. He noted “dysuria, on and off over the last year, abx [antibiotics] 3x with some benefit, daughter died of cervical ca, sometimes urine red or red blood post micturition, MSU showed some microscopic haematuria, last colposcopy ok. Plan:refer to gynae”.

5.26 On 8/1/15 the Claimant spoke to a receptionist L. He recorded “spoke to patient regarding appointment and if i would speak to dr about getting in sooner at hospital as still in a lot of discomfort and blood in urine on this ongoing problem. doctor said if was to try re-refer her 2 weeks it would be after the appointment already given so to keep original appointment but dr delight did offer to prescribe a antibiotics to see if that helped with the discomfort”(sic). Trimethoprim was prescribed.

5.27 The Claimant attended the gynaecology clinic at Hospital on 21/1/15. She was subsequently referred on to the urology clinic. On 20/03/15 a cystoscopy confirmed a bladder tumour.

6. SUMMARY OF RELEVANT WITNESS STATEMENTS

6.1 This summary is taken from the letter of 3/11/16 from the Defendant written in response to the allegations.

6.2 The Defendant comments on the allegation that he was negligent on the 28/06/10 (2.1). He explains that the reason for the comment “Normal-OK for this patient” was that the MSU on 28/06/10 showed a mixed bacterial growth which was consistent with contamination rather than a urinary tract infection. He states that he believed that the finding of microscopic blood in the urine could be attributed to a recent infection.

6.3 The Defendant then responds to the allegation that he was in breach of duty on 21/02/14 and 26/02/14 (2.2). He states that he is uncertain what the Claimant was requesting him to do when she consulted on 21/02/14. He states “Was it to repeat her MSU following her recent treatment with amoxicillin which she might have finished in the last 24 hours of producing the sample causing uncertainty about the relevance of a negative MSU culture and was still experiencing ongoing symptoms of dysuria” (sic). He further states that the guidance as to how many abnormal samples are needed before a referral is needed are unclear. He refers to “National Practice Recommendations for Hematuria:how to evaluate in the absence of strong evidence” (ref 1). This he suggests, advises referral to urology if blood is present on two or three properly performed and collected urinalyses. He then suggests that urinary tract infection is a common cause of blood in the urine. Furthermore he states that the Claimant had had a large loop excision and that bleeding from the cervix could account for the haematuria.

6.4 He states that he was not at work on the 26/02/14. Had he been at work that day he would have had to log on with a smart card and consequently all entries would bear his name.

6.5 In response to the third allegation of breach of duty relating to 13/11/14 and 14/11/14 (2.3) he discusses the reasons why he referred to a gynaecologist and not a urologist. He explains that the Claimant had presented with urinary symptoms two months after the loop excision of her cervix and that she was still being monitored by gynaecology. He further states that “visible blood on wiping left the possibility of a vaginal source of the blood”. He also states that the Claimant “reported visible blood but her urine samples are nowhere recorded as showing macroscopic hematuria [visible blood in the urine]”. He notes that the Claimant had a family history of gynaecological cancer. He also states that although it was not recorded in the notes, the Claimant complained of vaginal pain. He summarises “the focus was still on a gynaecological cause”.

6.6 The Defendant explains that bladder cancer is generally diagnosed earlier in men and that a lack of urological training in doctors may be a factor. He further explains that only a small number of patients referred with microscopic haematuria are found to have bladder cancer.

7. OPINION ON BREACH OF DUTY

7.1 It is alleged that the Defendant was in breach of duty for failing to refer to a urologist on 28/06/10 and was in breach of BAUS/RA guidelines.

7.2 The Claimant's initial presentation on 22/04/10 with offensive urine and blood, white blood cells and nitrites on urine dipstick was consistent with a urinary tract infection.

7.3 A repeat urine dipstick test on 04/05/10 was positive for blood but no white blood cells or nitrites. This was abnormal but could reasonably have been attributed to a recent urinary tract infection.

7.4 When finding blood only in the urine, it would be usual practice to wait for a period of time and then repeat the urine dipstick test. However repeat MSU was sent for analysis. This result suggested a contaminated sample.

7.5 It would be standard practice to repeat this MSU in view of the likely contamination but the result was processed by the Defendant's name with an action of "Patient does not need to be informed".

7.6 A repeat MSU was sent but not until the 08/06/10 with no clinical information recorded. The urine culture showed the bacteria Pseudomonas but the status was set to "Patient does not need to be informed" when processed by Dr K.

7.7 It would be usual practice to inform a patient of an abnormal result and ascertain whether they were symptomatic.

7.8 The records state that a telephone message was left with the Claimant on 24/06/10 instructing her to repeat the MSU. A further MSU was sent on 28/06/10 this was again suggestive of contamination. This was erroneously given a comment of "Normal- Ok for this patient" by the Defendant and the status was set to "Patient does not need to be informed". There was no subsequent follow up of this result.

7.9 In summary it is my opinion that the abnormal urine results between 22/04/10 and 28/06/10 were improperly followed up. I do not believe however, that on 28/06/10 there was a breach of duty by the Defendant, in failing to refer to a urologist or breach in not following the BAUS/RA guidelines, as urinary tract infection remained a possible cause for the abnormalities. It is my opinion that it would have been reasonable to follow up the abnormalities in primary care before onward referral.

7.10 It is alleged that the Defendant was in breach of duty on 21/02/14 and/or 26/02/14 for failing to refer for urgent urological assessment given the persistent finding of haematuria. It is alleged that this amounts to a breach of the 2005 NICE guidelines (9.2).

7.11 The Claimant was seen on 14/01/14 by Dr Y with symptoms of a urinary tract infection. She received treatment on the basis of symptoms without undergoing urine dipstick testing.

7.12 She presented with ongoing symptoms on 10/02/14. A urine dipstick showed blood only and an MSU excluded infection (appendix 1). Microscopic haematuria in the absence of a urine infection requires repeat urine dipstick for blood but in this case her MSU was processed as normal and no follow up arranged. It is unclear who processed the result.

7.13 The Claimant continued to have symptoms and a further urine dipstick on 19/02/14 showed blood.

7.14 When the Defendant saw the claimant on 21/02/14, he incorrectly stated that her last MSU was clear. In his statement he subsequently attributed the microscopic haematuria to either a recent infection or the loop excision of her cervix which took place on 05/11/13.

7.15 The Defendant arranged to repeat an MSU. This again showed blood and culture suggested that this was probably a contaminated sample. Again this result was processed as no further action but it is unclear who processed it. The Defendant denies being at work on this date and this is supported by the fact that there are no clinical entries with his name.

7.16 It is my opinion that it was incorrect to attribute the microscopic haematuria to a urine infection or her previous surgery. It is unclear whether the Claimant did indeed have a urinary infection on 14/01/14. Even if this was the case I do not believe that the finding of microscopic haematuria over a month later should have been attributed to this. Similarly it is my opinion that the bleeding should not have been attributed to wide loop excision of the cervix around 3 months previously.

7.17 NICE guidelines 2005 recommend “in patients aged 50 years and over who are found to have unexplained microscopic haematuria, an urgent referral should be made”. It is my opinion that the Defendant failed to follow these guidelines on 21/02/14 and was therefore in breach of duty of care.

7.18 The final allegation is that the Defendant was in breach of duty on 13/11/14 and 14/11/14 for failing to refer for urgent urological assessment and instead referring the Claimant to a gynaecologist

7.19 The Claimant was seen in colposcopy clinic on 19/06/14 and discharged back to the care of the GPs.

7.20 On 11/09/14 the Claimant saw Dr A with dysuria , “occasional blood seen on wiping” and “half a stone in weight loss”. An MSU was sent, blood tests were organised and she was treated with antibiotics.

7.21 The blood test results were unremarkable. Due to a labelling error the MSU was repeated. This showed no sign of infection but the presence of blood. This was reported as “Normal. No further Action” by Dr J.

7.22 The Claimant was seen by Dr I on 06/10/14 with ongoing burning and frequency and treated with antibiotics. She was given further antibiotics by Dr I when her symptoms persisted after 7 days. When the Claimant returned on 27/10/14, Dr I noted that her urinary symptoms had improved but that she still had blood on wiping herself. Dr I further suggested that she should be referred to urologist or gynaecologist if the Claimant’s symptoms had not settled in a further 2 weeks.

7.23 When the Defendant saw the claimant on 13/11/14, he noted that the Claimant had been suffering with dysuria for a year and that there was macroscopic haematuria (visible blood in the urine). The Defendant referred the Claimant to the gynaecologist despite the fact she had persistent macroscopic haematuria and had been discharged from the colposcopy clinic. The fact that she had a family history of gynaecological cancer (her daughter had died from cervical cancer) did not make it more likely that she had a gynaecological rather than a urological cause for her symptoms.

7.24 It is my opinion, that in keeping with the NICE 2005 guidelines, the Claimant should have been referred by the 2 week pathway to a urologist. I do not believe that a reasonable body of competent GPs would have referred her to gynaecology rather than referring urgently to urology. I therefore conclude that the Defendant was in breach of duty.

8. SUMMARY OF CONCLUSIONS

8.1 On several occasions between 22/04/10 and 28/06/10, urine results were processed inappropriately, either incorrectly being reported as normal or inadequately followed up. I do not believe however, that a urology referral was mandatory on 28/06/10 as urinary tract infection remained a possibility. It is therefore my opinion that the Defendant was not in breach of duty on 28/6/10 for failing to refer for a urological assessment.

8.2 Between 14/01/14 and 21/02/14 the Claimant's urine persistently showed microscopic haematuria without an obvious cause. NICE 2005 guidelines suggest urgent referral in an over 50 year old with this finding. It is my opinion that the Defendant was therefore in breach of duty on 21/02/14 for failing to follow the NICE 2005 guidelines and refer the Claimant urgently to a urologist.

8.3 Between 11/09/14 and 13/11/14 the Claimant presented repeatedly with a history of visible blood in the urine and pain on passing urine. It is my opinion that the Defendant placed too much weight on her past gynaecological history and failed to acknowledge and act upon the urological "red flag symptoms".
It is therefore my opinion that the Defendant was in breach of duty on 13/11/14 for failing to refer for urgent urological assessment and instead referring the Claimant to a gynaecologist.

9. REFERENCES

9.1 NICE 2005 Referral guidelines for suspected cancer
http://webarchive.nationalarchives.gov.uk/20060715141954/http:/nice.org.uk/nicemedia/pdf/cg027niceguideline.pdf
9.2 Joint Consensus Statement on the Initial Assessment of Haematuria (BAUS/RA)
http://www.renal.org/docs/default-source/what-we-do/RA-BAUS_Haematuria_Consensus_Guidelines.pdf?sfvrsn=0

EXPERT'S DECLARATION

1. I understand that my overriding duty is to the court, both in preparing reports and in giving oral evidence. I have complied and will continue to comply with that duty.

2. I have set out in my report what I understand from those instructing me to be the questions in respect of which my opinion as an expert is required.

3. I have done my best, in preparing this report, to be accurate and complete. I have mentioned all matters which I regard as relevant to the opinions I have expressed. All of the matters on which I have expressed an opinion lie within my field of expertise.

4. I have drawn to the attention of the court all matters, of which I am aware, which might adversely affect my opinion.

5. Wherever I have no personal knowledge, I have indicated the source of factual information.

6. I have no included anything in this report which has been suggested to me by anyone, including the lawyers instructing me, without forming my own independent view of the matter.

7. Where, in my view, there is a range of reasonable opinion, I have indicated the extent of that range in the report.

8. At the time of signing the report I consider it to be complete and accurate. I will notify those instructing me if, for any reason, I subsequently consider that the report requires any correction or qualification.

9. I understand that this report will be the evidence that I will give under oath, subject to any correction or qualification I may make before swearing to its veracity.

10. I have attached to this report a statement setting out the substance of all facts and instructions given to me which are material to the opinions expressed in this report or upon which those opinions are based.

11. That I know of no conflict or interest of any kind, other than any which I have disclosed in my report.

12. That I do not consider that any interest which I have disclosed affects my suitability as an expert witness on any issues on which I have given evidence.

13. That I will advise the party by whom I am instructed if, between the date of my report and the trial, there is a change in circumstances which affect my answers to either of the above two points.

STATEMENT OF TRUTH

I confirm that I have made clear which facts and matters referred to in the report are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

Signature:

_____

Date:

_____

APPENDICES

Appendix 1. Urine testing may be carried out either by urine dipstick testing (urinalysis) or by laboratory microscopy and culture (sometimes referred to as an MSU- mid stream urine or MC&S-microscopy, culture and sensitivity).

Urinary tract infection is commonly diagnosed on the basis of symptoms along with positive dipstick findings. A positive test for nitrites is highly suggestive of urinary tract infection. A positive test for white blood cells is also suggestive but less specific for infection. Positive tests for blood may be due to to infection but also malignancy or other pathology. Protein may be found in a wide range of conditions.

Urine laboratory (MSU) testing involves counting the number of cells in a sample and culturing organisms if present. It can be used to confirm infection or guide treatment with the most appropriate antibiotic.

The finding of mixed bacterial growth and epithelial cells (cells from outside the bladder) may indicate that the sample has become accidentally contaminated. This would usually prompt sending a further sample.