disease and the remaining 2 patients had stage IIIA and stage IIIB disease. 3 had an adenocarcinoma, 3 had a large cell carcinoma and 1 patient had a squamous cell carcinoma. Treatment was discontinued in 2 of those 7 patients because of progression after 13 and 36 weeks. As the other 5 responding patients received subsequent therapy (surgery plus radiotherapy in 1 case and radiotherapy in 4 cases) after vinorelbine–cisplatin in order to sustain response, the median duration of response to chemotherapy alone is 30+ weeks. For the entire population, time to progression ranges from 4 to 100 weeks (median 20).

The median duration of survival is 11 months. 7 patients are still alive after 8+, 19+, 19+, 22+, 24+, 26+ and 31+ months of follow-up. Among them, 2 had a partial response to chemotherapy (1 stage IIIB, 1 stage IV) and 5 were considered as no change. Among those last 5 patients, 3 had metastatic disease at the time of inclusion in the present study, which had occurred after initial local treatment.

CONCLUSION

The present phase I–II study allowed us to demonstrate the feasibility of high-dose cisplatin combined with vinorelbine when the latter is administered at 30 mg/m^2 according to the weekly schedule which established its efficacy as a single agent. Cisplatin and vinorelbine dose intensities could be maximised by adjusting vinorelbine dosage according to neutropenia since neither grade 3 nor grade 4 neutropenia involved life-threatening sepsis in the present study. Interestingly, the threshold dose of vinorelbine, below which no objective response was observed in this study, is 25 mg/m^2. This fact should be kept in mind for the design of future protocols including vinorelbine.

Considering the results previously reported with vinorelbine alone, both the response rate and response duration observed in the present study deserve further randomised trials in order to determine the exact role of vinorelbine alone or combined with cisplatin in the treatment of advanced NSCLC.

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Acknowledgements—The authors thank Mrs Lorna Saint-Ange and Mrs Catherine Logé for their assistance in the revision of the manuscript.

Eur J Cancer, Vol. 28A, No. 11, pp. 1865–1869, 1992.
Printed in Great Britain

0964–1947/92 $5.00 + 0.00

Surgical Treatment of Myeloma of Bone

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33 patients treated operatively for plasma cell disease were analysed. There were 21 men and 12 women with an average age of 54 years. There was an undefined bone tumour in 23 cases, and a pathologic fracture in 10 cases. In only 6 cases was the diagnosis known before the operation. The primary tumour localisations were: vertebral column in 13, pelvis in 7, femur in 6, humerus in 2, rib in 1, tibia in 1, fibula in 1, scapula in 1 and olecranon in 1 case. 16 diagnostic biopsies were taken. Vertebral tumours were mainly evacuated or decompressed, combined with a stabilising procedure in 8 cases. A total of six endoprotheses, five to the femur and one to the humerus were performed. Two primarily wide resections, to the fibula and to the scapula were done. There were no locally recurring tumours during a mean follow-up time of 4 years and 2 months, and we conclude that operative and oncologic treatment is successful in providing the patient with a stable, pain-free locomotive system.
Eur J Cancer, Vol. 28A, No. 11, pp. 1865–1869, 1992.

INTRODUCTION

THE TREATMENT of myeloma consists of chemotherapy and irradiation, and nowadays bone marrow transplantation is also used in selected cases [1]. Surgical intervention is necessary in cases of solitary plasmacytoma of bone and in complications of multifocal myeloma. Solitary plasmacytoma of bone is a localised plasma cell tumour that accounts for about 5% of malignant plasma cell diseases [2]. The most common location is the vertebral column [3]. The usual treatment of plasmacytoma of bone is a combination of surgery and radiotherapy [4]. The expected survival rate is 45–85% 10 years after the diagnosis [5, 6]. In multifocal myeloma, surgery is usually needed because of a pathologic fracture and is aimed to reduce pain and allow early mobilisation.

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Revised 25 Nov. 1991; accepted 27 Jan. 1992.

PATIENTS AND RESULTS

The patients treated operatively for solitary plasmacytoma or multiple myeloma in the Department of Orthopaedics and

Table 1. *Surgical treatment of myeloma*

Case	Sex	Age	Manifesting site	Operation 1	Operation 2	Operation 3	Operation 4	Follow-up
1	F	64	Humerus	Endoprothesis	B	Endoprothesis	O	5y10m
2	M	63	Humerus	E+C+O				4y1m
3	F	46	Scapula	Wide resection				1y9m
4	F	72	Olecranon	B				3y10m
5	M	29	Rib IV	B				8y11m
6	M	55	C II	Halo frame				2y4m
7	M	66	Th IV	E				10m
8	F	57	Th VIII	E+C				9m
9	M	43	Th IX	B				2y5m
10	F	41	Th X	B	E+grafting			11m
11	M	57	Th XII	D+HR				7y8m
12	M	61	L I	D+HR	Spondylodesis			5y4m
13	M	50	L I	D+HR				2y2m
14	M	56	L I	E+Spondylodesis				7m
15	M	50	L II	HR	E+grafting			13y4m
16	M	62	L II	D+HR				4y4m
17	M	52	L III	B	B			9m
18	M	46	L V	B				4y
19	M	56	Pubic arch	B				6y8m
20	F	49	Ileum	B				5m
21	M	62	Ileum	B				2y10m
22	M	56	Ileum	E+C				5y
23	F	81	Sacrum	B				2m
24	M	32	Sacrum	B				2y7m
25	F	43	Sacrum	B,sacrum	B, tibia	E+C	O	10y
26	M	20	Femur diaphysis	B	E+C+O	E+C+O	Vascular fibular graft	5y7m
27	M	39	Femur	E+C+IMN				11y3m
28	F	71	Femur, subtrochanter	E+C+O				3y4m
29	M	37	Femur, neck	Endoprothesis	Endoprothesis	O		10y1m
30	M	70	Femur, neck	Endoprothesis				2y7m
31	F	74	Femur, proximal	Massive endoprothesis				4y
32	F	31	Fibula	Wide resection				6y1m
33	F	79	Tibia	O	O	O		8m

M = Male, F = female, E = evacuation, C = cement, O = osteosynthesis, B = biospy, IMN = intramedullary nail, HR = Harrington rods, D = decompression, y = years, m = months.

Traumatology at Helsinki University Central Hospital between 1981 and 1990 were reviewed. The factors analysed were age, sex, presenting symptom, the reason for operative treatment, site and extent of the disease, method of operative treatment and eventual outcome.

There were 33 patients, 21 men and 12 women. Their average age was 54 years (range 20–81) at the time of diagnosis.

The leading symptom was pain, but there were also 4 cases which manifested themselves as paraparesis. The reason for operative treatment was an undefined bone tumour in 23 cases, and a pathologic fracture in 10 cases. In only 6 cases was the diagnosis known before the operation, in an additional 4 cases it was strongly suspected on the basis of X-rays.

In the group of 23 unknown bone tumours, serum electrophoresis was normal in 14 cases. In 4 cases the result was inconclusive and a new test was recommended after 2 months. In 5 cases we did not wait for the electrophoresis result as 2 patients were paraplegic, 1 had instability in the acetabular roof, 1 instability in L I and one had a suspicion of rib metastasis with no knowledge of a primary tumour. Three of these five showed later an M component in their electrophoresis. 1 patient had been followed because of Bence-Jones proteinuria for a couple of years before the diagnosis of a scapular lesion was made.

The primary tumour localisations were: vertebral column in 13, pelvis in 7, femur in 6, humerus in 2, rib in 1, tibia in 1, fibula in 1, scapula in 1 and olecranon in 1 case (Table 1).

Operative methods

16 diagnostic biopsies were taken. In 3 cases this operation was followed by evacuation and stabilisation, 1 in femur, 1 in tibia and 1 in Th X (Table 1). In 1 case of humeral tumour, biopsy was followed by endoprothesis and in 2 cases a confirming secondary biopsy was performed, one from the same site (L III) and one from another site (tibia, formerly sacrum).

Vertebral tumours were mainly evacuated or decompressed, combined with a stabilising procedure in 8 cases. In 5 cases the treatment of thoracolumbar junction tumour was with decompression or evacuation and Harrington rods. In 3 cases the treatment was by biopsy only, and the tumour in C II was only stabilised externally. All these patients received postoperative radiotherapy.

A total of six endoprotheses, five to femur and one to humerus were performed. Two wide resections were done, to the fibula and to the scapula.

Evacuation of tumour mass in 12 cases was adjunct in 3 cases by cementation only, in 5 cases with cementation and

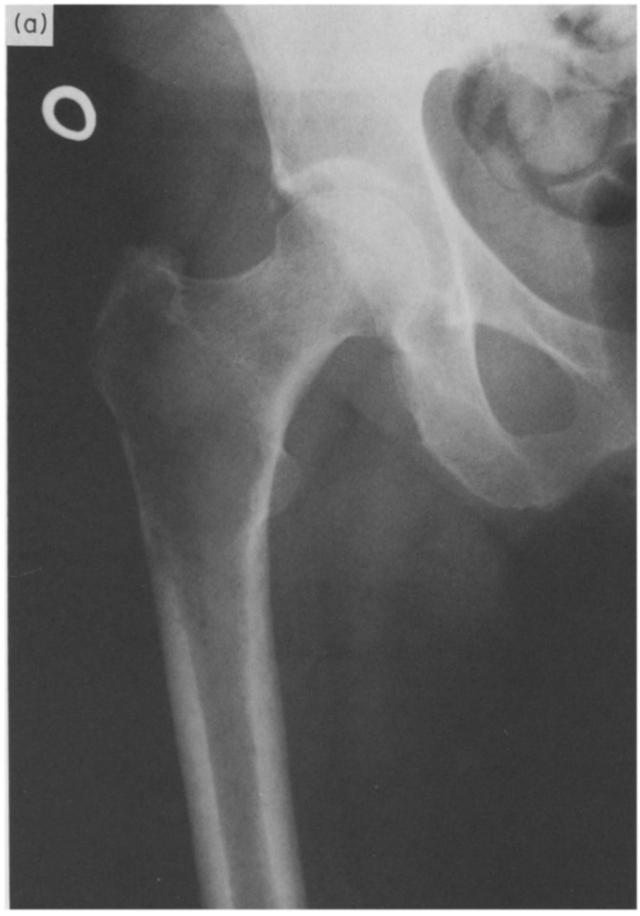

Fig. 1. Unknown enlarging tumour of proximal femur.

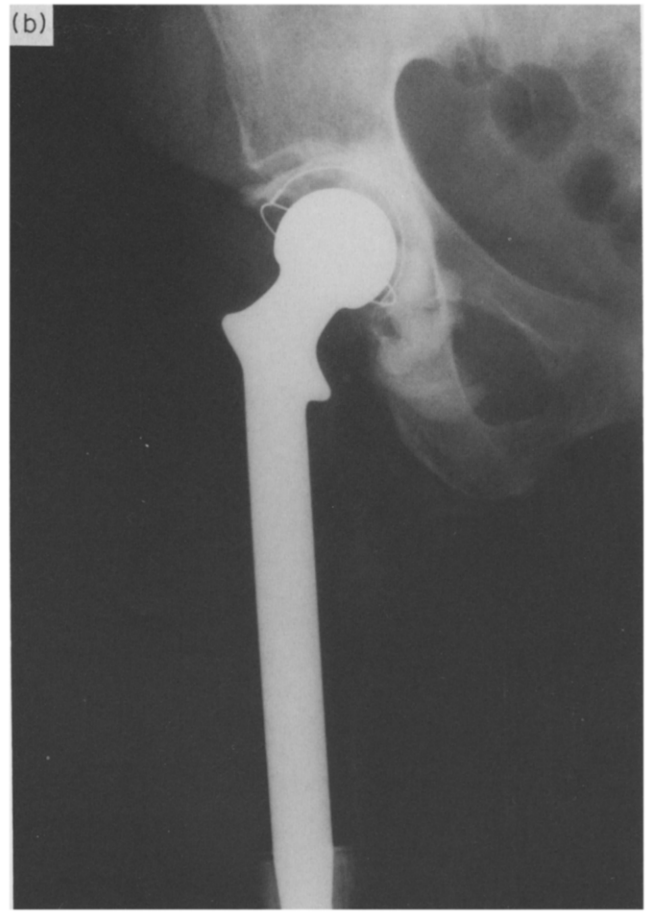

Fig. 2. Result after wide resection and resection endoprothesis.

osteosynthesis, in 3 cases with bone grafting and in 1 case (Th IV) with no stabilisation. 1 patient (No.33) had several osteosyntheses of long bones. One surgical complication was observed, as patient no.26 fell after the biopsy was taken and sustained a pathologic fracture.

Later, many of these patients with apparently solitary tumours have turned out to have multiple myeloma. There are only 12 apparently solitary tumours according to the criteria by Bataille [3]. They were in scapula, olecranon, C II, Th X, L I, L II, acetabular roof, sacrum, subtrochanteric femur, proximal femur, femur diaphysis and fibula. The longest follow-up period for these solitary tumours is 13.3 years. No tumour whether plasmacytoma or myeloma focus has recurred locally during follow-up so far. The mean follow-up time is 4 years and 2 months (Table 1), 8 of the patients have died.

Our patient no.1 had a hip reconstruction with a resection endoprothesis (Fig.1) due to a reaction which was defined as inflammatory. The recovery was good (Fig.2). 2 years 6 months later, a pathologic fracture in the upper humerus (Fig.3) was operated with wide resection and endoprothesis (Fig.4) and the diagnosis of myeloma was made only then. Retrospectively, the hip specimens showed microscopically the same myeloma pattern.

DISCUSSION

This material is highly selective as most patients with myeloma are not treated by operative methods. The usual investigations in our department following the discovery of a malignant bone tumour in plain X-ray films include CT scans and isotope scans. In addition, every patient will go through laboratory tests that include blood sedimentation rate, red blood cell count and leucocyte differential count, serum creatinine, calcium, alkaline phosphatase, serum electrophoresis and urine and serum immunoelectrophoresis.

The operative treatment of myeloma has only been described in selected cases of plasmacytomas [7–9], as most multiple myelomas are diagnosed by serum immunoelectrophoresis, Bence–Jones protein in urine, X-rays and other non-invasive investigations. There are, however, cases of unknown bone tumours where only surgical biopsy gives the diagnosis. This was the case with most of our patients with plasmacytoma.

The mean interval between the onset of symptoms and diagnosis of plasmacytoma is usually long, around 1 year [4]. Pain is the most common symptom [10]. The surgical treatment aims at a diagnostic biopsy, in the case of the spine often combined with a decompressing procedure. Radical surgical resections appear unwarranted [11], although recommended in selected cases [7]. There is no place for chemotherapy in the treatment of plasmacytomas which are radiosensitive, 45–55 Gy is usually a curative dosage.

The appearance of multiple bone involvement in solitary plasmacytoma occurs with a median of 8 years after the diagnosis is made [12] though not always [5, 13]. Younger patients are less likely to develop this systemic complication [2]. Anyway, a life-long follow-up is necessary.

With a 10-year follow-up period 85% of solitary myeloma

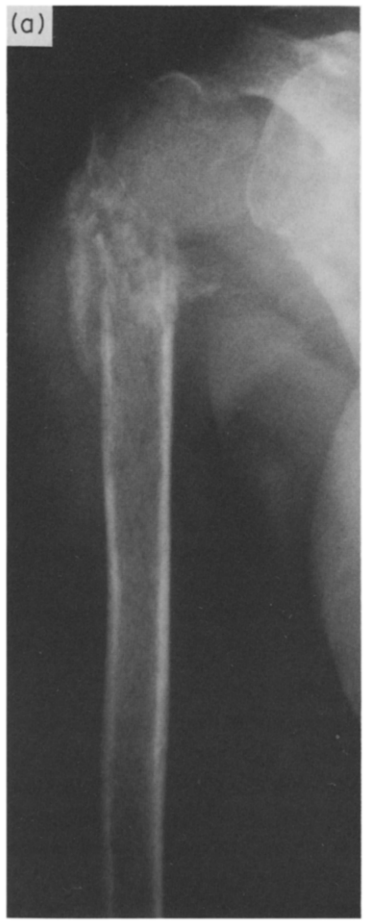

Fig. 3. Pathologic fracture of proximal humerus 2 years later in the same patient.

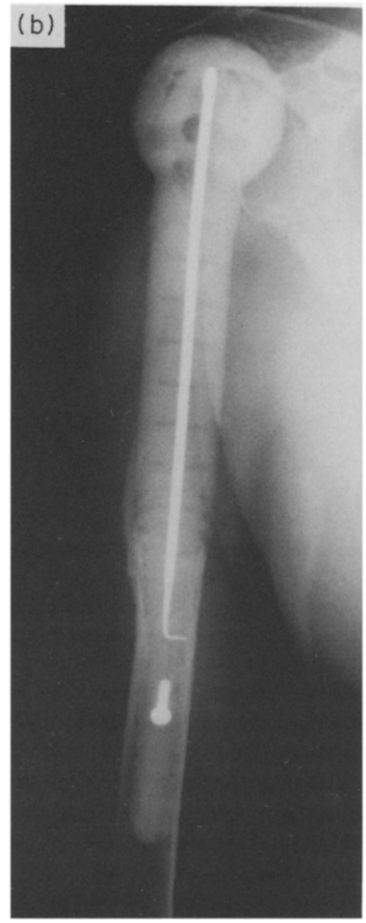

Fig. 4. Result after wide resection and isoelastic resection endoprothesis.

patients had a local recurrence (12%), new solitary lesions at distal sites (15%) or developed typical multiple myeloma (58%) [3]. Local recurrence was nearly always in spinal lesions, as only 7.3% of those in peripheral bones had local recurrence. In another series no patient receiving 45 Gy or more to the solitary lesion had a local failure [6]. In our series there were no local recurrences of plasmacytoma or myeloma foci. The mean follow-up time of 4 years and 2 months is enough to warrant discussing the benefits of operative treatment of myeloma although it is not enough to discuss the eventual outcome of apparently solitary plasmacytomas.

The surgical treatment of myeloma of bone depends on tumour location.

(1) Tumours of the spine: Biopsy is usually taken because of unknown vertebral tumour causing pain or paraplegia. These tumours are best treated by operative decompression and stabilisation of the spine [4]. Surgery cannot usually be radical and therefore postoperative radiotherapy should be given [14].

(2) Tumours of weight-bearing long bones with usually a pathologic fracture. These tumours are treated with internal fixation often combined with evacuation of the tumour mass and cementation [10]. Although there is contamination due to fracture and intralesional surgery, these tumours can be cured by irradiation and local recurrences are rare. Wide resections are thus only warranted to lessen the operative bleeding in intralesional procedures or in cases where internal osteosynthesis is not possible, i.e. proximity of joints.

(3) Tumours of non-weight-bearing long bones. Internal fixation and cementation or endoprotheses are recommended to minimise pain and maximise functional recovery [15].

In this series there were no locally recurring tumours, and we conclude that operative and oncologic treatment is successful in treating the disease locally and providing the patient with a stable, pain-free locomotive system.

After diagnosis by biopsy and eventual stabilisation, or in selected cases by resection combined with osteosynthesis, the treatment and follow-up of plasma cell diseases is oncological.

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Eur J Cancer, Vol. 28A, No. 11, pp. 1869–1872, 1992.
Printed in Great Britain

0964–1947/92 $5.00 + 0.00

Screening for Psychiatric Disorders in a Lymphoma Out-patient Population

Darius Razavi, Nicole Delvaux, Anne Bredart, Marianne Paesmans, Louisette Debusscher, Dominique Bron and Pierre Stryckmans

The Hospital Anxiety and Depression Scale (HADS), a four-point, 14-item self-assessment questionnaire, was tested as a screening method for psychiatric disorders in a sample of 117 Hodgkin's lymphoma and non-Hodgkin lymphoma consecutives out-patients. A receiver operating characteristic (ROC) analysis was performed, giving the relationship between the true positive rate (sensitivity) and the false positive rate (1 – specificity). This makes it possible to choose an optimal cut-off score that takes into account the costs and benefits of treatment of psychiatric disorders (mainly adjustment, depressive and anxiety disorders) in a lymphoma out-patient population. A cut-off point of 10 gave 84% sensitivity and 66% specificity. HADS appears in this study to be a well accepted, simple, sensitive and specific tool.
Eur J Cancer, Vol. 28A, No. 11, pp. 1869–1872, 1992.

INTRODUCTION

LYMPHOMAS REPRESENT a relatively common form of malignancy. Radiotherapy and especially chemotherapy may be given over long periods of time. Patients under treatment, in remission or cured, require frequent follow-up in a specialised treatment centre. A substantial mortality rate reduction has been obtained for Hodgkin's and non-Hodgkin lymphoma in the last few years, giving a higher recovery frequency and a significant lengthening of life. Nevertheless, patients may still suffer from psychological distress since treatments are unfortunately often accompanied by side-effects and long-term sequelae.

The prevalence and specificity of psychological distress in a lymphoma population has been retrospectively studied on a 90-patient sample at a mean of 32 months after diagnosis [1]. Although most patients were free of disease and not receiving treatment at follow-up, some still suffered from a lack of energy (31 patients), loss of libido (19), irritability (22) and tiredness (19); 30 patients complained of continued impairment of thinking or disturbance of short-term memory. After diagnosis, 21 (23.3%) patients had suffered from an anxiety state or depressive illness, or both, while 27 (30%) had experienced borderline anxiety or depression. These results have been confirmed in a prospective study [2].

The psychological problems that develop in long-term survivors of Hodgkin's disease were examined in a cross-sectional survey of 403 patients [3]. Energy had not returned to patients' satisfaction in 37% of the cases. Patients with self-reported energy loss were more likely to be depressed. 18% of the 403 patients had scores consistent with clinical levels of depression; this rate of depression is comparable to a general community sample. However, 29% of the 62 patients who were below 3 years from the diagnosis had elevated depression scores that were significantly higher than the standard community sample and the 333 patients with longer follow-up.

Although high prevalence rate of psychiatric diagnosis has been reported, no studies have investigated screening procedures in out-patient settings for site-specific malignancies. Early detection of psychological and psychiatric morbidity is therefore needed in these ambulatory settings in order to facilitate identification of patients who may be helped by specific rehabilitation or psychosocial interventions.

The Hospital Anxiety and Depression Scale (HADS), a short self-assessment instrument developed by Zigmond and Snaith [4] has been found to be useful in screening adjustment disorders and major disorders in an in-patient cancer population [5] with sufficiently enough sensitivity (75%) and specificity (75%), regarding the prevalence of these conditions, for a cut-off score of 13.

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Revised 25 Mar. 1992; accepted 7 Apr. 1992